



**Matthew Rodriguez**  
Secretary for  
Environmental Protection



## Department of Toxic Substances Control

Barbara A. Lee, Director  
5796 Corporate Avenue  
Cypress, California 90630



**Edmund G. Brown Jr.**  
Governor

Via Electronic Mail

August 24, 2015

Ms. Yvonne Meeks  
Topock Project Manager  
Pacific Gas and Electric Company  
4325 South Higuera Street  
San Luis Obispo, California 93401

SOIL RCRA FACILITY INVESTIGATION/REMEDIAL INVESTIGATION WORKPLAN  
(JANUARY 2013) AND ADDENDUM AND ERRATA (JANUARY 2014) FOR THE  
PACIFIC GAS AND ELECTRIC COMPANY, TOPOCK COMPRESSOR STATION,  
NEEDLES, CALIFORNIA (EPA ID NO. CAT080011729)

Dear Ms. Meeks:

The Department of Toxic Substances Control (DTSC) has completed its review of the "*Soil RCRA Facility Investigation/Remedial Investigation (RFI/RI) Workplan*" (January 2013) and the subsequent "*Addendum and Errata*" (January 2014) for the Pacific Gas & Electric (PG&E) Topock Compressor Station Project. The documents, herein collectively referred to as the Soil RFI/RI Workplan, were prepared by CH2MHill for PG&E.

As part of the evaluation of the Soil RFI/RI Workplan, an Environmental Impact Report (Soil EIR) for the PG&E Topock soil investigation project was prepared by DTSC in accordance with the California Environmental Quality Act. The draft Soil EIR was released for public notice on July 7, 2014 for a 60-day public comment period. Public meetings were held in Needles, California and Golden Shores, Arizona, during the comment period. Comments received on the draft Soil EIR and new information on the biological receptors at the site prompted an update of the biology section of the draft Soil EIR. A partially recirculated draft Soil EIR was released for public notice on April 15, 2015 for a 45-day public comment period. Over 750 individual comments were received by DTSC from the two public comment periods. After careful consideration of the comments received and evaluation of the potential environmental impacts as documented in the Soil EIR, DTSC put forth a resolution for the certification of the final

Soil EIR as documented in the enclosed Statement of Decision and Resolution of Approval for the PG&E Topock soil investigation project on August 24, 2015.

Based on the review of the Soil RFI/RI Workplan and the findings and evaluations in the final Soil EIR, DTSC hereby approves the PG&E Topock Soil RFI/RI Workplan with the following conditions:

1. PG&E shall follow the Mitigation Monitoring Reporting Program and all the conditions of approval identified in the Statement of Decision and Resolution of Approval (Attachment) for the PG&E Topock soil investigation project dated August 24, 2015.
2. PG&E shall submit to DTSC a detailed field implementation schedule within 30 days of this letter. An updated schedule shall be submitted to DTSC within the first week of every month, or more frequently if significant changes are made to the schedule, for the duration of the implementation of the Soil RFI/RI Workplan.
3. During field implementation, PG&E shall submit to DTSC a progress report every Monday (or Tuesday if Monday is a holiday) of each week for the duration of the implementation of the Soil RFI/RI Workplan. The progress report shall have a summary of the activities from the previous week, including all significant items or issues encountered; a detailed schedule of the activities planned for the current week; and the schedule of activities anticipated for the following week. The first progress report shall be submitted 2 weeks prior to the start of field activities.

If you have any questions regarding this letter, please feel free to contact me at (714) 484-5439 or by email at [aaron.yue@dtsc.ca.gov](mailto:aaron.yue@dtsc.ca.gov).

Sincerely,



Aaron Yue  
Project Manager  
Department of Toxic Substances Control

jm:aky 081502B

Enclosure: Statement of Decision and Resolution of Approval for the PG&E Topock Soil Investigation Project, August 24, 2015

cc: PG&E Topock Consultative Workgroup Members – via e-mail  
PG&E Topock Geo/Hydro Technical Workgroup Members – via e-mail  
Tribal Representatives in PG&E Project Contact List – via e-mail  
Technical Review Committee Contact List – via e-mail

Ms. Yvonne Meeks  
August 24, 2015  
Page 3 of 3

Enclosure

Statement of Decision and Resolution of Approval for the  
PG&E Topock Soil Investigation Project, August 24, 2015

## **Statement of Decision and Resolution of Approval**



**CALIFORNIA DEPARTMENT OF TOXIC SUBSTANCES CONTROL  
STATEMENT OF DECISION AND RESOLUTION OF APPROVAL  
FOR THE  
PACIFIC GAS AND ELECTRIC COMPANY  
TOPOCK COMPRESSOR STATION  
SOIL INVESTIGATION PROJECT  
SCH No. 2012111079**



**A RESOLUTION OF THE DTSC APPROVING THE SOIL INVESTIGATION PROJECT, INCLUDING THE FINAL SOIL WORK PLAN, ADOPTING THE CEQA FINDINGS OF FACT AND STATEMENT OF OVERRIDING CONSIDERATIONS, ADOPTING THE MITIGATION MONITORING AND REPORTING PROGRAM, AND ADOPTING THE CONDITIONS OF APPROVAL FOR THE TOPOCK COMPRESSOR STATION SOIL INVESTIGATION PROJECT**

WHEREAS, the Environmental Impact Report (EIR) prepared for the PG&E Topock Compressor Station Soil Investigation Project (Project) identifies and considers the potentially significant and reasonably foreseeable adverse environmental effects of various actions associated with the Project, the primary purpose of which is to gather sufficient soil sample to be able to reliably characterize the nature and extent of soil and sediment contamination within the Project Site. The Project includes soil sampling and analysis as described in the Soil RCRA Facility Investigation/Remedial Investigation (RFI/RI) Work Plan (Soil RFI/RI Work Plan or Soil Work Plan) (CH2M Hill 2013), and the potential need for bench scale tests, pilot studies, and geotechnical evaluations to support a future Soil Corrective Measures Study/Feasibility Study (Soil CMS/FS) and plant or other biota sampling activities to support an ecological risk assessment within, and in the vicinity of, the Pacific Gas & Electric (PG&E) Topock Compressor Station (Station) site in San Bernardino County, California. The Final EIR (FEIR) consists of three volumes: Volume 1 – Comment letters on the Draft EIR (DEIR) and responses to those comments; Volume 2 – Comment letters on the Partially Recirculated DEIR (Biological Resources) and responses to those comments; and Volume 3 – Revised DEIR in its entirety. The Final EIR also includes an Errata, and Figure 12-1 to the Errata, which considers a DOI preferred alternative access route for a portion of the site via an existing dirt roadway located off the National Trails Highway observation area immediately north of the proposed work in Bat Cave Wash and a minor addition to the haul routes within Bat Cave Wash to facilitate the new preferred access route.

WHEREAS, soil within the Station fence line and in the vicinity of the Station has been affected by historical releases of chemicals of potential concern (COPCs), including hexavalent chromium [Cr(VI)]<sup>1</sup>, metals, acids, petroleum hydrocarbons, polycyclic aromatic hydrocarbons (PAHs), polychlorinated biphenyls (PCBs), volatile organic compounds (VOCs), semi-volatile organic compounds (SVOCs), dioxins and furans, pesticides, and asbestos (CH2M HILL 2013). Various other COPCs have also been detected at concentrations above soil screening levels.<sup>2</sup>

WHEREAS, the soil investigation activities required to determine the nature and extent of soil and sediment contamination at the Station and surrounding area (the Project Site) are evaluated and summarized in the Soil Work Plan and the Corrective Measures/Feasibility Study Work Plan (CM/FS Work Plan). Implementation of the proposed Project would provide DTSC with sufficient data for the completion of the RFI/RI process that is consistent with State and Federal guidance for site investigations and would support evaluation of possible cleanup action(s) if determined necessary. The results of the investigation activities will be compiled and combined with past investigation data sets for the preparation of the Final RFI/RI Report Volume 3 (Soil) which will enable the evaluation and selection of corrective measures, if necessary, in a future Soil Corrective Measures Study/Feasibility Study (Soil CMS/FS).

WHEREAS, the Soil Work Plan proposes investigation activities at a total of 292 locations with up to 876 total individual samples. Specific locations and number of samples collected at each location may vary based on access considerations, the results of field screening, and field observations. Further, because of unforeseen circumstances or data gaps, additional samples/sampling locations may be necessary. As part of the EIR, therefore, a contingency of up

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<sup>1</sup> Cr(VI) is a form of chromium. Chromium is a metal naturally found in rocks, soil, and the tissue of plants and animals. Cr(VI) is used in industrial products and processes and is a known carcinogen when inhaled. On May 28, 2014, the California Department of Public Health adopted a new Maximum Contaminant Level for Cr(VI) of 0.01 mg/L, effective July 1, 2014.

<sup>2</sup> Soil screening levels are used to identify chemical concentrations that would require further soil investigation and possible remediation. The screening levels are based on naturally-occurring background concentrations, DTSC California Human Health Screening Levels, USEPA Regional Screening Levels, or ecological comparison values. If human- or ecological-based screening levels are lower than the background concentration, the background concentration is used as the screening level.

to 25 percent additional sampling locations (i.e., up to 73 locations) was included in the EIR's impacts analysis.

WHEREAS, depending on the results of the soil sampling, bench scale tests, pilot studies, and geotechnical evaluations may be deemed necessary to evaluate potential soil remedy options, if cleanup action is necessary. This could include up to three bench scale tests that would collect contaminated soil and test at an offsite laboratory to evaluate the potential for soil washing, in situ soil flushing and in situ fixation/chemical reduction/stabilization. It could also include in situ soil flushing and in situ stabilization/chemical fixation pilot studies that involve construction of either an infiltration gallery or four injection wells and/or construction of a small-scale on-site treatment delivery system (infiltration gallery or four injection wells) over an area of known soil contamination. Geotechnical evaluations within or near Areas of Concern could include up to eight geotechnical borings in areas that have steep slopes where remediation is determined necessary.

WHEREAS, plant or other biota sampling may be deemed necessary to validate the baseline ecological risk assessment to be conducted after the soil investigation activities are complete. This could include plant tissue sampling, invertebrate tissue sampling, and small mammal tissue sampling to obtain representative tissue concentrations to evaluate dietary exposure.

WHEREAS, investigation and remediation at the Station and the surrounding area is being conducted under the Resource Conservation and Recovery Act of 1976 (RCRA) and the Comprehensive Environmental Response, Compensation, and Liability Act of 1980 (CERCLA). RCRA corrective action activities at the Project Site were initiated in 1987 with the completion of a RCRA facility assessment conducted by the U.S. Environmental Protection Agency (USEPA).

WHEREAS, RCRA provides a framework for USEPA to remediate hazardous waste contaminated sites throughout the United States. In California, DTSC implements RCRA under such delegated authority from the USEPA through state law.

WHEREAS, DTSC has an ongoing Corrective Action Consent Agreement with PG&E, which describes DTSC's authority over the Project. Investigative activities at and in the vicinity of the Station date back to the late 1980s with the identification of Solid Waste Management Units (SWMUs) through a RCRA Facility Assessment (RFA). Closure activities of former hazardous waste management facilities at the Station were performed from 1988 to 1993. As documented in the Administrative Consent Agreement, PG&E also completed a soil investigation in the Bat Cave Wash area which documented the presence of chromium in the environment around the former percolation bed. The RCRA Facility Investigation (RFI) began in 1996 when DTSC and PG&E executed the Corrective Action Consent Agreement. Since that time, additional data collection and evaluation has been performed to characterize the nature and extent of contamination in and around the Station, and to identify potential remedial alternatives.

WHEREAS, DTSC has worked for over 7 years in collaboration with U.S. Department of Interior (DOI), U.S. Bureau of Land Management (BLM), U.S. Fish & Wildlife Service (USFWS), the U.S. Bureau of Reclamation, other state and local agencies, the public and tribal stakeholders to develop the Soil Work Plan, which identifies soil investigation activities required to determine the nature and extent of soil and sediment contamination at the Station and surrounding area, and which incorporates revisions from prior draft Work Plans based on input from Interested Tribes<sup>3</sup> during the process – including the removal of approximately 50 previously identified soil sampling locations which were of concern to Interested Tribes. (See also Soil Work Plan Appendix I.)

WHEREAS, DTSC prepared, in consultation with Environmental Science Associates (ESA), an EIR for the Project in full compliance with CEQA.

WHEREAS, DTSC has, on this date, first adopted a resolution certifying the FEIR for the Topock Compressor Station Soils Investigation Project as adequate under CEQA.

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<sup>3</sup> "Interested Tribes" as explained in the EIR, include the Chemehuevi Indian Tribe, the Cocopah Indian Tribe, the Colorado River Indian Tribes (CRIT), the Fort Mojave Indian Tribe (FMIT), the Fort-Yuma Quechan Indian Tribe, and the Hualapai Indian Tribe that have actively participated in the Topock project.



WHEREAS, DTSC finds the FEIR complies with the terms and the spirit of the Settlement Agreements entered into between the Fort Mojave Indian Tribe and DTSC, executed by the parties in January 2006 to settle the matter of *Fort Mojave Indian Tribe v. DTSC* (Sacramento Superior Court Case No. 05CS00437), and in 2013 to settle the matter of *Fort Mojave Indian Tribe v. DTSC* (Sacramento Superior Court Case No. 34-2011-80000802).

**NOW, THEREFORE, BE IT RESOLVED and ADOPTED** by the Project Manager, on behalf of the Branch Chief and through the authority delegated by the Branch Chief and the Director of DTSC, Barbara A. Lee, and on behalf of DTSC that:

1. DTSC approves the Topock Compressor Station Soil Investigation Project, including the Final Soil Work Plan (January 2013). The approval of the Project is subject to the following conditions of approval:
  - (i) PG&E shall ensure that the Standard Operating Procedures (SOPs) and Best Management Practices (BMPs) outlined in the Soil RCRA Facility Investigation/Remedial Investigation Work Plan (known as the Soil Work Plan) are complied with as a condition of approval for the Project (see Section 2.2, “Standard Operating Procedures” on pages 2-5 through 2-13 of the Soil Work Plan, and Appendix J, “Displaced Soil and Hazardous Waste Management Procedures”). In addition, based on comments and discussions with the State of California Department of Fish and Wildlife (CDFW), PG&E shall ensure that boreholes do not remain open any longer than necessary to perform the sampling activities. All open boreholes will be secured or covered/capped when not in active use, or if left overnight, in a manner that prevents wildlife from gaining access into the borehole, thus ensuring boreholes do not pose a health and safety hazard to humans and wildlife.
  - (ii) Standard well and boring decommissioning procedures required by San Bernardino County and the California Department of Water Resources (DWR 1991) shall be followed for the decommissioning of all borings. Additionally, PG&E shall be responsible for implementing the guidance from the “Standard

Operating Procedure for Well and Borehole Decommissioning” (PG&E 2014) that was developed in coordination with Interested Tribes.

(iii) PG&E shall ensure that the applicable Avoidance and Mitigation Measures (AMMs) presented in the California Department of Fish and Wildlife letter dated March 6, 2014, and as identified below, are enforced for all work activities that occur within jurisdictional washes. The majority of AMMs presented in the letter are included as project-specific mitigation measures found in the adopted Mitigation Monitoring and Reporting Program (MMRP) (see FEIR Volume 3, Chapter 11). Consistent with the terms of the letter, DTSC requires that PG&E implement the following measures as conditions of approval, as tailored to this specific project, to ensure the protection of jurisdictional waters as recommended by CDFW:

- a. Any debris, bark, slash, rubbish, silt, cement or concrete or washings thereof, asphalt, oil or other petroleum products, or any other substances resulting from Project related activities that could be hazardous to aquatic life or waters of the state, shall be prevented from contaminating the soil and/or entering the waters of the state and shall not be deposited within 150 feet of the high water mark of protected waters, unless containerized. None of these materials shall be allowed to enter into, or be placed within, areas where they may enter or be washed by rainfall or runoff into waters of the State. When soil investigation activities are completed, any excess materials or debris shall be removed from the work area.
- b. During soil investigation activities, the contractor shall not dump any litter or debris within identified riparian/stream zones. All such debris and waste shall be removed daily and properly disposed of at an appropriate site. The cleanup of any pollution spills within identified riparian/stream zones, in the event they occur, shall begin immediately and PG&E shall notify CDFW, DTSC, and DOI immediately of any spills and shall consult with those agencies regarding cleanup procedures and requirements

- c. Vehicles shall not be driven or equipment operated in water-covered portions of the Colorado River or in wetted areas (including but not limited to ponded, flowing, or wetland areas) or where riparian vegetation is present , except as necessary to complete authorized work as described under the Work Plan.
  - d. Any equipment or vehicles driven and/or operated within or adjacent to the Colorado River shall be checked and maintained daily to prevent leaks of materials that, if introduced to water, could be deleterious to aquatic life, wildlife, or riparian and wetland habitat.
  - e. Project-related vehicle traffic and equipment storage shall be restricted to established roads, designated access roads, the working strip, storage areas, staging and parking areas, and other designated Project areas as analyzed in the EIR and included in the Final Work Plan.
  - f. Trash dumping, firearms, open fires (such as barbecues) not required by the activity, hunting, and pets are prohibited in work activity sites.
  - g. All equipment and vehicles used to implement the Project shall have federal- or state-approved spark arrestors. All work vehicles will carry an approved fire extinguisher (or backpack pump filled with water) and a shovel.
  - h. PG&E shall notify CDFW, in writing, at least 5 days prior to initiation of Project activities and at least 5 days prior to completion of soil investigation activities. The notification shall be sent to designated personnel at the Department of Fish and Wildlife, Colorado River Program via email.
- (iv) In order to fully protect water quality as it relates to erosion and storm water pollution, prior to initiation of soil investigation activities, and as detailed on pages 4.5-13 through 4.5-15 of the FEIR, Volume 3, PG&E is responsible for the preparation of an erosion control plan, to be submitted to DTSC prior to

implementation of the Project, that meets the substantive requirements of the Construction General Permit and the Stormwater Pollution Prevention Plan. The erosion control measures shall be implemented to reduce the potential for erosion and sedimentation in wetlands, waters of the United States, waters of the state, and habitat occupied by covered species and plant species when activities are the source of potential erosion impacts.


- (v) In the event of a sudden rain storm, the field team shall cease work in any washes and low lying areas.
- (vi) PG&E shall refrain from using the following staging areas which were identified as unacceptable staging areas by Interested Tribes: 1) the east side of the evaporation ponds and 2) the small staging area across from Interim Measure 3 (See Figure A). With respect to staging area 25, no impacts to the historic Route 66 sign are anticipated from use as a staging area. As described in the FEIR, Volume 3, Section 3.5.2.7, page 3-23, in areas where natural boundaries or fencing are not sufficient to define a staging area, PG&E would temporarily mark the boundaries of the staging areas with traffic cones, caution tape, or straw wattles. The historic Route 66 sign would fall outside of this boundary.
- (vii) PG&E shall ensure that a four foot area around where the four individual Mousetail suncup, identified in the 2012 floristic survey (FEIR Volume 3, Table 4.3-3), and which occur on the ravine slopes of Bat Cave Wash, will be avoided during all activities associated with this proposed Project, including soil investigation, bench scale tests, pilot studies, and geotechnical evaluations.
- (viii) Prior to completion of the Project, PG&E shall ensure that all previously undisturbed and unpaved work areas, which become disturbed as a result of implementation of the Remediation Investigation Work Plan, are raked/brushed to remove tire tracks and restored to substantially the same condition(s) as before the soil investigation sampling.

- (ix) Prior to implementation of any bench scale tests, pilot studies, geotechnical evaluations, or plant or other biota sampling, PG&E shall prepare a supplemental work plan that further describes the specific location, extent, configuration, and rationale for such activities, at which time DTSC will determine whether such activities are within the scope of the impact analysis contained within the certified EIR and the Project as approved by DTSC, or if any new potentially significant adverse impacts could result. Work plans will describe how bench scale tests, pilot studies, geotechnical evaluations, or plant or other biota sampling will meet the SOPs and BMPs described in (i) including any necessary provisions associated with the use of chemicals (e.g., health and safety plan, chemical standard operating procedure protocols and contingency plans to address chemical storage, containment, handling and spills/releases). Any supplemental work plan(s) will be provided to stakeholders, including Tribes, for review and comment.
- (x) Within 30 days of completion of the Project, including the completion of any pilot studies deemed needed, PG&E shall identify and provide to DTSC the amount of native riparian biological habitat impacted by the Project, if any, for DTSC verification. Once verified, DTSC shall provide that information to CDFW. Native riparian biological habitat does not include effects on salt cedar, tamarisk or other non-native or invasive plant species.
- (xi) Should 1:1 like kind habitat compensation be required to ensure “no net loss” pursuant to Mitigation Measure BR-1, DTSC agrees that 1:1 shall be the minimum “floor” requirement and may, after conferring further with CDFW, require a greater ratio depending on the circumstances. This clarification is included in the conditions of approval in response to CDFW’s letter of August 18, 2015, and a subsequent conference call between DTSC and CDFW staff on August 21, 2015.

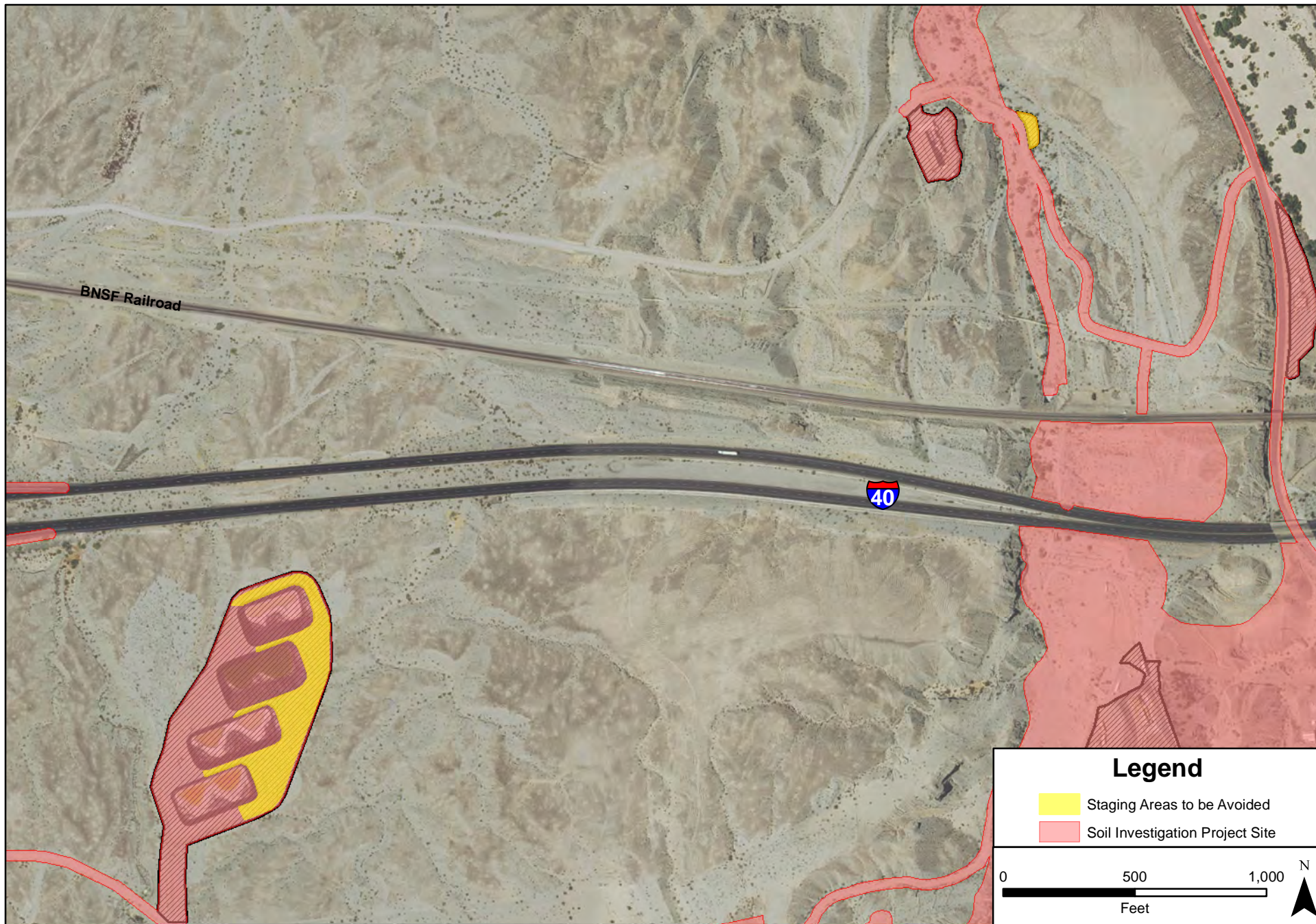
2. The CEQA Findings of Fact and Statement of Overriding Considerations for the Topock Compressor Station Soils Investigation Project, attached hereto as “Exhibit 1” and incorporated herein by reference, are hereby adopted.
3. The Mitigation Monitoring and Reporting Program (MMRP) for the Topock Compressor Station Soils Investigation Project, attached hereto as “Exhibit 2” and incorporated herein by reference, is hereby adopted.
4. DTSC directs staff to file a Notice of Determination (NOD) with the California Governor’s Office of Planning and Research regarding this determination within five working days and to mail notice to any person who has filed a written request for notices.

**PASSED AND ADOPTED** by the DTSC on August 24, 2015.

CALIFORNIA DEPARTMENT OF  
TOXIC SUBSTANCES CONTROL

By  \_\_\_\_\_  
Aaron Yue, Project Manager  
As directed and authorized by  
Karen Baker, CEG, CHG  
Branch Chief  
Office of Geology





**Legend**

Staging Areas to be Avoided

Soil Investigation Project Site

0 500 1,000  
Feet

N

**Topock Soil Investigation  
Project EIR**  
Map Creation Date: 8/10/2015  
Background Source: ESRI Maps Aerial

# **Soil Investigation Project Staging Area Avoidance**

**Figure A**



Exhibit 1 to the Statement of  
Decision and Resolution of Approval

CEQA Findings of Fact and  
Statement of Overriding  
Considerations



**PACIFIC GAS AND ELECTRIC COMPANY  
TOPOCK COMPRESSOR STATION  
SOIL INVESTIGATION PROJECT**

CEQA Findings of Fact and Statement of Overriding  
Considerations

Prepared for the  
California Department of Toxic Substances Control

August 2015



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## Findings of Fact and Statement of Overriding Considerations for the Topock Compressor Station Soil Investigation Project

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**Table 1:** Table of Significant Impacts, Mitigation Measures, and CEQA Findings of Fact

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# 1. Statement of Findings

The California Environmental Quality Act (CEQA) requires that public agencies shall not approve or carry out a project for which an environmental impact report (EIR) has been certified that identifies one or more significant adverse environmental effects of a project unless the public agency makes one or more written Findings for each of those significant effects, accompanied by a brief explanation of the rationale for each Finding (CEQA Guidelines Section 15091). This document presents the Findings made by the California Department of Toxic Substances Control (DTSC), in its capacity as the CEQA lead agency, regarding the Pacific Gas and Electric Company (PG&E) Topock Compressor Station (Station) Soil Investigation Project (Project).

These Findings are organized into the following sections:

Section 1.1 provides an introduction to these Findings.

Section 1.2 includes a summary of the Project.

Section 1.3 describes the CEQA environmental review process for the Project.

Section 1.4 contains DTSC's general Findings about the Project.

Section 1.5 contains DTSC's Findings of Fact for the Project.

Section 1.6 contains DTSC's Findings regarding alternatives to the Project.

Section 1.7 contains DTSC's Statement of Overriding Considerations for the Project.

Section 1.8 describes the Mitigation Monitoring and Reporting Program (MMRP) for the Project.

Section 1.9 provides a list of references.

## 1.1 Introduction

### 1.1.1 Requirements for Findings of Fact

CEQA requires public agencies to consider and identify the reasonably foreseeable and potentially significant adverse effects of their discretionary approvals of projects on the environment and, when feasible, to adopt and implement mitigation measures or alternatives that avoid or substantially lessen the significant effects of those projects. Specifically, Public Resources Code Section 21002 provides that "public agencies should not approve projects as proposed if there are feasible alternatives or feasible mitigation measures available which would substantially lessen the significant environmental effects of such projects [.]". The same section states that the procedures required by CEQA "are intended to assist public agencies in systematically identifying both the significant effects of proposed projects and the feasible alternatives or feasible mitigation measures which will avoid or substantially lessen such significant effects." Section 21002 goes on to state that "in the event [that] specific economic, social, or other conditions make infeasible such project

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alternatives or such mitigation measures, individual projects may be approved in spite of one or more significant effects thereof.”

Pursuant to the policy stated in Public Resources Code Sections 21002 and 21002.1, no public agency shall approve or carry out a project for which an EIR has been certified that identifies one or more significant effects on the environment that would occur if the project is approved or carried out unless both of the following occur:

- (a) The public approving agency makes one or more of the following findings with respect to each significant effect:
  - (1) Changes or alterations have been required in, or incorporated into, the project which mitigate or avoid the significant effects on the environment.
  - (2) Those changes or alterations are within the responsibility and jurisdiction of another public agency and have been, or can and should be, adopted by that other agency.
  - (3) Specific economic, legal, social, technological, other considerations, including considerations for the provision of employment opportunities for highly trained workers, make infeasible the mitigation measures or alternatives identified in the EIR.

(Public Resources Code Section 21081, subd (a); see also CEQA Guidelines Sections 15091, subd. (a).)

- (b) With respect to significant effects that were subject to Findings under paragraph (3) above, the public agency finds that specific overriding economic, legal, social, technological, or other benefits of the project outweigh the significant effects on the environment.

(Public Resources Code Section 21081, subd, (b).)

Public Resources Code Section 21061.1 defines “feasible” to mean “capable of being accomplished in a successful manner within a reasonable period of time, taking into account economic, environmental, social and technological factors.” CEQA Guidelines Section 15364 adds another factor in determining feasibility: “legal” considerations. (See also *Citizens of Goleta Valley v. Board of Supervisors* (1990) 52 Cal.3d 553, 565 (“*Goleta II*”).)

The concept of “feasibility” also encompasses the question of whether a particular alternative or mitigation measure promotes the underlying goals and objectives of a project (*City of Del Mar v. City of San Diego* (1982) 133 Cal.App.3d 410, 417 (*City of Del Mar*).); see also *Sierra Club v. County of Napa* (2004) 121 Cal.App.4th 1490, 1506-1509 [court upholds CEQA Findings rejecting alternatives in reliance on applicant’s project objectives]; *California Native Plant Society v. City of Santa Cruz* (2009) 177 Cal. App. 4th 957, 1001 [“an alternative ‘may be found infeasible on the ground it is inconsistent with the project objectives as long as the finding is supported by substantial evidence in the record’”]; *In re Bay-Delta Programmatic Environmental Impact Report Coordinated Proceedings* (2008) 43 Cal.4th 1143, 1165, 1166 [“feasibility is strongly linked to achievement of each of the primary [project] objectives”]).

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Moreover, “feasibility” under CEQA encompasses “desirability” to the extent that desirability is based on a reasonable balancing of the relevant economic, environmental, social, and technological factors.” (*City of Del Mar, supra*, 133 Cal.App.3d at p. 417; see also *Sequoyah Hills Homeowners Assn. v. City of Oakland* (1993) 23 Cal.App.4th 704, 715; *California Native Plant Society v. City of Santa Cruz, supra*, 177 Cal.App.4th at p. 1001 [after weighing “‘economic, environmental, social, and technological factors’ ... ‘an agency may conclude that a mitigation measure or alternative is impracticable or undesirable from a policy standpoint and reject it as infeasible on that ground’”].)

With respect to a project for which significant impacts cannot be avoided or substantially lessened through feasible mitigation measures or alternatives, a public agency, after adopting proper findings, may nevertheless approve the project if the agency first adopts a statement of overriding considerations setting forth the specific reasons why the agency found that the project's “benefits” rendered “acceptable” its “unavoidable adverse environmental effects.” (CEQA Guidelines, Sections 15093, 15043, subd. (b); see also Public Resources Code, Section 21081, subd. (b).) The California Supreme Court has stated, “[t]he wisdom of approving . . . any development project, a delicate task which requires a balancing of interests, is necessarily left to the sound discretion of the local officials and their constituents who are responsible for such decisions. The law as we interpret and apply it simply requires that those decisions be informed, and therefore balanced” (*Goleta II, supra*, 52 Cal.3d at page 576).

Because the EIR identified significant effects that may occur as a result of the Project, and in accordance with the provisions of CEQA and the CEQA Guidelines described above, DTSC hereby adopts these Findings as part of the approval of the Project. In making these Findings and in adopting the Statement of Overriding Considerations, DTSC has independently reviewed the draft environmental impact report (DEIR), Partially Recirculated DEIR and final environmental impact report (FEIR) for the Project as well as all other information in the record of proceedings (Record) on this matter. These Findings constitute DTSC’s best efforts to set forth the evidentiary and policy bases for its decision to approve the Project in a manner consistent with the requirements of CEQA. These Findings, in other words, are not merely informational, but rather constitute a binding set of obligations that come into effect with DTSC’s approval of the Project.

### **1.1.2 Documents Used as Basis for Findings and Approval of the Project**

The Record for DTSC’s decision on the Project and these Findings include the following documents, at a minimum:

- The Notice of Preparation (NOP) and all other public notices issued by DTSC in conjunction with the Project.
- Topock Compressor Station Soil Investigation Project DEIR prepared for DTSC by Environmental Science Associates (ESA), July 2014, and all appendices and supporting documents cited therein.
- All comments submitted by agencies, Tribes, or members of the public during the comment period on the DEIR.

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- The Partially Recirculated DEIR prepared for DTSC by ESA, April 2015.
  - All comments submitted by agencies, Tribes, or members of the public during the comment period on the Partially Recirculated DEIR.
  - Topock Compressor Station Soil Investigation Project FEIR prepared for DTSC by ESA, August 2015, which includes comments received on the DEIR and the Partially Recirculated DEIR, responses to those comments, appendices, and revisions to the DEIR, including an Errata, and Figure 12-1 to the Errata, which considers a DOI preferred alternative access route for a portion of the site via an existing dirt roadway located off the National Trails Highway observation area immediately north of the proposed work in Bat Cave Wash and a minor addition to the haul routes within Bat Cave Wash to facilitate the new preferred access route.
  - The MMRP for the Project.
  - All Findings and resolutions adopted by the DTSC in connection with the Project and all documents cited or referred to therein.
  - All reports, studies, memoranda, maps, staff reports, or other planning documents relating to the Project prepared by DTSC, consultants to DTSC, or responsible or trustee agencies with respect to DTSC's compliance with the requirements of CEQA and with respect to the Project.
  - All documents submitted to DTSC by other public agencies or members of the public in connection with the Project, up through the approval of the Project.
  - Any documentary or other evidence submitted to DTSC, at such information sessions, public meetings, and public hearings.
  - Matters of common knowledge to DTSC, including but not limited to federal, state, and local laws and regulations.
  - Any documents expressly cited in these Findings, in addition to those cited above.
  - Any other materials required for the Record by Public Resources Code Section 21167.6, subdivision (e).

These Findings are based upon substantial evidence in the entire Record before DTSC. The references to the DEIR, Partially Recirculated DEIR, and FEIR set forth in the Findings are for ease of reference and are not intended to provide an exhaustive list of the evidence relied upon for these Findings.

Pursuant to CEQA Guidelines Section 15091, subdivision (e), Aaron Yue of DTSC is the official custodian of the documents and other materials that constitute the Record upon which the decision is based, and such documents and other materials are located at the offices of DTSC, which are located at DTSC, 5796 Corporate Avenue Cypress, California 90630. Copies of the DEIR, Partially Recirculated DEIR, and FEIR are also available at DTSC's website, [www.dtsc-topock.com/](http://www.dtsc-topock.com/).

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## 1.2 Summary of the Project

The following information is intended to provide a summary of the key components of the Topock Compressor Station Soil Investigation Project and conclusions of the FEIR. Additional detailed information concerning each component of the Project is set forth in Chapter 3 of the revised DEIR, which is included in the FEIR as Volume 3.

### 1.2.1 Background and Need for Project

Past activities at the Station have resulted in the release of chemicals of potential concern (COPCs) into soil and groundwater. Under certain exposure conditions, these COPCs are harmful to human health and the environment. Investigation and remediation at the Station and the surrounding area (Project Site) is being conducted under the Resource Conservation and Recovery Act of 1976 (RCRA) and the Comprehensive Environmental Response, Compensation, and Liability Act of 1980 (CERCLA). Both RCRA and CERCLA are federal laws. RCRA provides a framework for the U.S. Environmental Protection Agency (USEPA) to remediate hazardous waste sites in the United States. The authority under RCRA, however, can be delegated to states. In California, DTSC implements RCRA under such delegated authority from the federal USEPA through state law.

Soil within the Station fence line and in the vicinity of the Station has been affected by historical releases of COPCs, including hexavalent chromium Cr(VI) and other metals, acids, petroleum hydrocarbons, polycyclic aromatic hydrocarbons (PAHs), polychlorinated biphenyls (PCBs), volatile organic compounds (VOCs), semi-volatile organic compounds (SVOCs), dioxins and furans, pesticides, and asbestos (CH2M HILL 2013). Various other COPCs have also been detected at concentrations above soil screening levels. Currently, groundwater beneath the Project Site is undergoing parallel investigation and remediation activities (CH2M HILL 2009; DTSC 2011).

The Project includes those specific activities identified in the *Soil RCRA Facility Investigation/Remedial Investigation Work Plan* (Soil RFI/RI Work Plan or Soil Work Plan) (CH2M HILL 2013; Appendix A to the final environmental impact report [FEIR]) and the treatability studies described in the *Corrective Measures/Feasibility Study Work Plan* (CM/FS Work Plan) (CH2M HILL 2008).

### 1.2.2 Ongoing Groundwater Remediation

In addition to soil contamination, groundwater beneath and near the Station has been contaminated by chemicals associated with historical releases in areas known as Bat Cave Wash and East Ravine. Investigation and cleanup of the contaminated groundwater is being conducted under both RCRA (DTSC lead) and CERCLA (United States Department of the Interior [DOI] lead). The main contaminant of concern in groundwater is Cr(VI), which is harmful to human health and ecological receptors in the environment. Other chemicals present in the groundwater include total chromium [Cr(T)], molybdenum, selenium, and nitrates.

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An FEIR (DTSC 2011) and Errata was certified by the DTSC for the Topock Compressor Station Groundwater Remediation Project (Groundwater FEIR) on January 31, 2011 (SCH No. 2008051003). The approved Groundwater Remediation Project, as discussed in the Groundwater FEIR and final project approval documents, involves manipulation of subsurface water flow to move a contaminated groundwater plume with Cr(VI) and other COPCs, originating from past operations at the Station, through a treatment zone. This treatment zone or “in situ reactive zone (IRZ)” will be created by introducing a carbon substrate such as, but not limited to, ethanol, molasses, lactate, or whey to induce microbial growth, which in turn creates an environment where the Cr(VI) is reduced to less toxic Cr(III) and precipitated.

The Groundwater FEIR considered the potentially significant adverse environmental impacts of adopting the preferred remedy, determined to be Alternative E—In Situ Treatment with Freshwater Flushing—through the *Final Groundwater Corrective Measures Study/Feasibility Study Report for SWMU 1/AOC 1 and AOC 10*, completed in December 2009. In addition, DTSC prepared the Topock Compressor Station Groundwater Remediation Project Environmental Impact Report Addendum No. 1 for Alternative Freshwater Source Evaluation Activities (DTSC 2013) in August 2013, which evaluated additional freshwater sources for consideration in the Groundwater Remediation Project.

The Groundwater Remediation Project is currently in the design stage. Under the most optimistic of timeframes, DTSC anticipates final approval of the Groundwater Remediation Project will not occur until late 2015 or 2016, with construction beginning shortly thereafter. As described in the Groundwater FEIR, the Groundwater Remediation Project and the activities associated with soil investigation and cleanup were determined to have independent utility by DTSC (DTSC 2011), and therefore are considered as separate projects. For purposes of the FEIR analysis, however, the potential effects of the Groundwater Remediation Project are considered as a reasonably foreseeable future project for purposes of the cumulative impacts analysis in the Project FEIR. The soil investigation activities, moreover, will not change the scope of the Groundwater Remediation Project. The soil investigation activities are therefore not an expansion of the Groundwater Remediation Project and do not change the nature or scope of the Groundwater Remediation Project. The two projects involve different contaminants and distinct environmental risks; while Cr(VI) may be present in the soil, as well as the groundwater, elevated concentrations of various metals, dioxins/furans, PAHs, PCBs, and total petroleum hydrocarbons (TPHs), as well as some SVOCs, have also been detected in the soil. Because of the nature of the contamination and contaminated substrate, the two projects would necessarily employ different technologies on different schedules for different durations.

In addition, if the soil investigation activities that are the subject of the FEIR indicate that soil remediation is necessary, future environmental review would be required before initiating a remediation project for contaminated soil. Accordingly, the EIR is limited to the soil investigation activities described in the FEIR Volume 3, Chapter 3, “Project Description.”



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### 1.2.3 Project Objectives

The primary and fundamental objective of the Soil Investigation Project is to gather sufficient soil samples to be able to reliably characterize the nature and extent of soil and sediment contamination within the Project Site. If approved, soil and sediment would be analyzed for COPCs previously identified in the Project Site (inside and outside the Station fence line) that resulted from historical Station practices, as informed by prior soil sampling, thereby enabling completion of the Final RCRA Facility Investigation and Remedial Investigation Report (RFI/RI Report) Volume 3 (Soil) (Final RFI/RI Report Volume 3 (Soil)) and risk assessment as required by the 1996 Corrective Action Consent Agreement as soon as practicable and consistent with applicable state laws and regulations. Additional Project objectives include:

- Finalizing the evaluation of soil properties and contaminant distribution to support preparation of a future Soil Corrective Measures Study/Feasibility Study (Soil CMS/FS), including gathering a sufficient level of information to identify a range of remedial alternatives
- Assessing whether soil contaminant concentrations pose a threat to groundwater
- Assessing whether soil and sediment contamination have the potential to migrate off-site and, if so, gathering sufficient information to assess measures that may be required to prevent and minimize such migration to ensure protection of health, safety, and the environment

The soil investigation activities are for informational gathering purposes and do not predetermine, should soil remediation be deemed needed, remedial design options or alternatives. Rather, the data collected from implementation of the Project would be combined with the existing data sets to address the Data Quality Objectives outlined in the Soil Work Plan and inform DTSC if additional action or remediation is necessary for the identified investigation areas. The investigation of soil would also inform and enable, if necessary, the evaluation and selection of corrective measures in a future Soil CMS/FS (see FEIR Volume 3, Chapter 3, “Project Description”).

### 1.2.4 Project Location

The Project would be implemented at and in the vicinity of the Station, which is located in the Mojave Desert approximately 12 miles southeast of the City of Needles, California, and approximately 4 miles south of the community of Golden Shores, Arizona (see Figure 3-1 in FEIR Volume 3, Chapter 3, “Project Description”). The Station is within a 66.8-acre parcel of land owned by PG&E that is located approximately 1,500 feet west of the Colorado River and less than 1 mile south of Interstate 40 (I-40). The area of the Station that is developed (buildings and/or paving) is fenced and encompasses approximately 15 acres.

The Project Site is shown in Figure 3-2 of the FEIR Volume 3, Chapter 3, and includes areas within which soil investigation activities would occur, such as Areas of Concern (AOCs) and Solid Waste Management Units (SWMUs), as well as the approximately 26 acres anticipated to be needed for equipment staging, access/haul routes, and observation areas. Investigation within

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the Project Site would occur both inside and outside the Station fence line (see Figure 3-2 of Volume 3 in the FEIR). The Project Site totals approximately 128.5 acres and encompasses areas beyond PG&E's property line.

The lands adjoining the PG&E parcel are owned and/or managed by a number of government agencies and private entities. Private land includes properties owned by the Fort Mojave Indian Tribe (FMIT), California Department of Transportation – leased land, the Burlington Northern Santa Fe Railway, and other privately owned lands. In addition, land owned by the United States is under the jurisdiction, custody, and control of the DOI and includes the Havasu National Wildlife Refuge, which is managed by the U.S. Fish and Wildlife Service (USFWS), as well as lands managed by the U.S. Bureau of Land Management (BLM) and the U.S. Bureau of Reclamation.

The majority of the Project Site is located within an area that was evaluated in the Groundwater FEIR (see FEIR Volume 3, Section 2.2.3 for more information) and is also within the Area of Potential Effects that has been defined by the DOI under Section 106 of the National Historic Preservation Act for purposes of Native American consultation by federal agencies associated with the Station soil and groundwater investigation and remedial activities.

## **1.2.5 Description of the Project**

The Project includes soil sampling and analysis as described in the Soil Work Plan; potential bench scale tests, pilot studies, and geotechnical evaluations to support a future Soil CMS/FS; and potential plant or other biota sampling activities to support ecological risk assessment. Bench scale tests and pilot studies may be implemented after soil sampling analysis is completed to evaluate potential soil remedy options if remedial action is necessary. As a condition of approval for the Project, prior to implementation of any bench scale tests, pilot studies, geotechnical evaluations, or plant or other biota sampling, PG&E shall prepare a supplemental work plan that further describes the specific location, extent, configuration, and rationale for such activities, at which time DTSC will determine whether such activities are within the scope of the impact analysis contained within the certified EIR and the Project as approved by DTSC, or if any new potentially significant adverse impacts could result. These work plans will describe how bench scale tests, pilot studies, geotechnical evaluations, or plant or other biota sampling will meet the Standard Operating Procedures (SOPs) and Best Management Practices (BMPs) outlined in the Soil Work Plan, including any necessary provisions associated with the use of chemicals (e.g., health and safety plan, chemical standard operating procedure protocols and contingency plans to address chemical storage, containment, handling and spills/releases). Any supplemental work plan(s) will be provided to stakeholders, including Tribes, for review and comment.

### **1.2.5.1 Soil Sampling and Sample Analysis**

The Project, as described in the Soil Work Plan, includes the collection of surface and subsurface soil and sediment samples and the chemical analysis of those samples for COPCs based on information gained from past soil investigations. The Soil Work Plan proposes investigation activities at a total of 292 locations with up to 876 total individual samples. Specific locations and

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number of samples collected at each location may vary based on access considerations, the results of field screening, and field observations. Further, because of unforeseen circumstances or data gaps, additional samples/sampling locations may be necessary. Therefore, a contingency of up to 25 percent additional sampling locations (i.e., up to 73 locations) is included in the EIR evaluation and, if all were to be needed, would extend the timeframe of the sampling by approximately 2 to 3 months. The Project includes the following activities, as identified in the Soil Work Plan:

- Acquire permission or permits to access certain restricted areas.
- Create physical access to certain locations on the existing network of roads where limited access currently exists (e.g., grading, boulder removal, or vegetation trimming, pruning, or clearing).
- Establish temporary weather and dust monitoring stations, as determined necessary.
- Set up staging areas for equipment and displaced soil storage, maintenance/fueling, and decontamination; to the extent feasible, staging areas will be located in previously disturbed and existing operational areas, with either existing natural topographic boundaries or fencing that defines the staging area boundaries.
- Stake sample locations.
- Before beginning soil investigation activities, conduct pre-investigation field checks.
- Identify potential conflicts with subsurface utilities.
- Conduct video surveys and flow testing/dye testing of storm drain lines.
- Drill or excavate soil borings.
- Install soil vapor probes.
- Collect and preserve soil, soil gas, pore water, and sediment samples for laboratory analyses.
- Perform certain analyses in the field using field-testing equipment and methods.
- Plug and abandon boreholes.
- Transport the samples to the analytical laboratory.
- Analyze the samples for selected COPCs.
- Evaluate for data gaps and, ultimately, present data and conclusions in a written report.
- Manage investigation-derived waste (IDW); any long-term storage of excavated soil would also be in existing operational areas.

The Project also includes surveys of subsurface utilities in order to identify and avoid subsurface utilities when determining soil sampling locations by conducting a geotechnical survey or potholing using alternative methods, including electromagnetic induction, vertical magnetic gradient, or ground-penetrating radar. These surveys would serve to guide the investigation to

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safe locations for drilling, as well as identify areas where subsurface objects, voids, or changes might affect other Project activities. The existing storm drain alignment would be investigated using video survey and flow-testing/dye-testing methods, as feasible. These surveys would serve to guide the investigation to safe locations for drilling, as well as identify areas where subsurface objects, voids, or changes might affect other Project activities.

Soil samples will be taken using one or more of the following options: (1) small hand tools (trowel, shovel, slide-hammer, and hand auger); (2) a sonic or hollow-stem auger drilling rig; (3) a hydrovac truck in conjunction with hand tools; and (4) a backhoe or excavator. Hand tools would be used in areas of limited access, areas with topographic constraints, or areas with other constraints. The hydrovac process would be used for borings up to approximately 10 feet below ground surface (bgs) and to clear the first 10 feet of deeper borings when such borings are located within the Station fence line. Backhoes or excavators would be used for trenching and for collecting soil samples in sloped and unstable areas. A sonic drill rig would be used for soil borings deeper than 10 feet bgs. The drill rigs would use conventional truck-mounted drilling equipment or all-terrain-capable equipment (track-mounted or rubber balloon tires), depending on access considerations.

Several types of waste materials, known as IDW, would be generated during the drilling and sampling activities. IDW materials that would be generated include drill cuttings, sampling equipment wash water (decon water), personal protective equipment, and incidental trash. Appendix J of the Soil Work Plan describes the management procedures for the handling and characterization of IDW, including both hazardous and nonhazardous materials. The IDW management procedures are designed to ensure that IDW is appropriately handled to be protective of human health and the environment. In addition, the management process is designed to maximize the amount of soil that is reused on-site. Attachment 1 of Appendix J of the Soil Work Plan focuses on the reuse procedures, taking into consideration the FMIT statement regarding Project Site background and cultural significance of on-site soil. The estimated amount of IDW materials that may be generated ranges from less than 5 cubic yards up to 20 cubic yards of solid waste and up to 2,000 gallons of water.

Standard well and boring decommissioning procedures required by San Bernardino County and the California Department of Water Resources (DWR) (DWR 1991) would be followed for the decommissioning of all borings. After sampling has been completed, boreholes would be grouted from the total depth to within 6 to 12 inches of the ground surface with a bentonite-cement grout installed continuously in one operation to effectively seal the hole. Native soil would be used to fill the top 6 to 12 inches. In addition, guidance from the “Standard Operating Procedure for Well and Borehole Decommissioning” (PG&E 2014) would also be followed for the decommissioning of all wells and boreholes associated with the Project. This document was developed in coordination with DTSC and the Tribes, and identified decommissioning requirements for various scenarios that may be encountered at the Project Site. The maximum area around a boring that may be disturbed for excavation and restoration activities is estimated to be a maximum of approximately 20 feet in diameter, excluding the access route used by the drilling rig that installed the borehole. The borehole abandonment rig would use that same access route.

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### **1.2.5.2 Bench Scale Tests and Pilot Studies**

Bench scale tests and pilot studies may be implemented to evaluate potential soil remedy options if remedial action is deemed necessary based on the soil sampling results. The bench scale tests and pilot studies to be considered will therefore be guided by the results of the soil sampling activities and soil risk assessment.

#### **Bench Scale Tests**

Bench scale tests and pilot studies may be implemented to evaluate potential soil remedy options, if remedial action is determined to be necessary. A total of three bench tests may be implemented, including soil washing, in situ soil flushing, and in situ fixation/chemical reduction/stabilization. The tests would consist of collecting three to five 5-gallon buckets of contaminated soil for each treatment methodology for off-site testing. The soil would be excavated using either hand tools or an excavator and would then be shipped to an off-site laboratory for testing. Soil used for bench scale testing would be disposed of by the laboratory and would not be reused on-site.

#### **Pilot Studies**

**In Situ Soil Flushing.** The in situ soil flushing pilot study would consist of a pilot test area plot located in an area known to have contamination, flushing it with water (possibly containing flushing reagents), and testing the then flushed soil to see if the contaminants are removed from the soil. The in situ soil flushing pilot study would include the construction of either an infiltration gallery or four injection wells for the application of water. Contaminants would be transferred from soil to water, which would then be recovered via six extraction wells. Recovered water would then be treated using the existing on-site treatment facility or it would be trucked to an off-site treatment facility. While the exact location for the soil flushing has not yet been determined, plausible areas where soil flushing would be a viable remedial technology would be within the bottom of Bat Cave Wash. Existing vegetation would be avoided.

**In Situ Stabilization/Chemical Fixation.** The in situ stabilization/chemical fixation pilot study would involve the addition of reagents to react with targeted constituents in the soil to chemically convert contaminants into insoluble minerals that are permanently stable at the Project Site. This would include construction of a small-scale on-site treatment delivery system (infiltration gallery or four injection wells) over an area known to have contaminated soil. Reagents would be applied to soil by infiltrating a liquid from the surface or through the injection wells. While the exact location has not yet been determined, plausible areas where in situ stabilization/fixation would be a viable remedial technology would be within the bottom of Bat Cave Wash and within the Station. Existing vegetation would be avoided in the bottom of Bat Cave Wash.

### **1.2.5.3 Geotechnical Evaluations**

Up to eight geotechnical evaluations would be performed to provide information regarding the strength characteristics of subsurface soil and slope stability. It is anticipated that geotechnical evaluations would be undertaken within or near AOCs that have steep slopes and where remediation is determined necessary. Geotechnical borings would be drilled using hollow-stem auger drills. Soil samples would be collected using the standard penetration test and modified California ring samplers for index properties, strength, and compaction characteristics.

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#### **1.2.5.4 Plant or Other Biota Sampling**

Plant or other biota sampling, including invertebrates and small mammals, may be conducted to evaluate the potential risk to herbivorous and invertivorous wildlife populations. Tissue samples would be collected from locations where soil sampling has already been completed or planned, provided adequate biomass is available from those locations. Plant tissue samples would be collected using less-invasive methods, for example by hand pruning without sacrificing individual plants. Tissue would be collected from as few plants as practical to provide a representative sample of diet concentrations in that specific sampling location. Invertebrate tissue sampling, if conducted, would result in mortality of individual invertebrates. Between eight and ten pit traps would be used to collect invertebrates for tissue analysis in the laboratory. Small mammal tissue sampling, if conducted, would be collected using Sherman live or similar traps deployed on the ground surface. The specific target species, if any, would be dependent on the outcome of the baseline ecological risk assessment for soil. Typical small mammal tissue sampling methods entail mortality of individual animals. However, no impact to the health of small mammal populations would be associated with the relatively small number of individuals that would be collected.

#### **1.2.5.5 Work Area Restoration**

Once soil investigation activities are complete, all Project equipment and materials would be removed from the work area. If not paved, the area would be raked/brushed to remove tire tracks and restored to substantially the same condition(s) as before the soil investigation sampling. At the mouth of Bat Cave Wash, up to 2 acres of vegetation would be trimmed, pruned, or cleared using a chainsaw and wood chipper. Complete vegetation removal is not anticipated in any work areas (see FEIR Volume 3, Section 3.5.2.1). Trimming, pruning, or clearing of vegetation may be needed to access some sites and clear around sample areas. No action will be taken to revegetate work areas. As described in the Soil Work Plan, roots would be left in place to allow for regrowth of vegetation (including the mouth of Bat Cave Wash, where root balls would be left in place). Revegetation is expected to occur naturally and rapidly within one to two growing seasons based on past on-site experience. For example, in 2007, vegetation was cleared in the area where Monitoring Well (MW) 52 and MW-53 were installed, near the Colorado River and I-40. Vegetation in this area grew back within two growing seasons.

As described in FEIR Volume 3, Section 3.5.3.2, any infiltration galleries associated with the pilot studies would be removed and backfilled with native material. All injection and recovery wells would be removed and holes abandoned in accordance with DTSC guidelines (DWR Bulletin 74-90, California Well Standards) and American Society for Testing and Materials Standard 5299-99, Standard Guide for Decommissioning of Ground Water Wells, Vadose Zone Monitoring Devices, Boreholes, and Other Devices for Environmental Activities. SOPs for well decommissioning would also be followed (FEIR Volume 3, Section 3.5.7).

#### **1.2.5.6 Standard Operating Procedures and Best Management Practices**

The soil investigation activities will adhere to SOPs and Best BMPs to ensure protection of health, safety, and the environment. The relevant SOPs and BMPs are also included as conditions of approval of the Project. Section 2.2 of the Soil Work Plan, Standard Operating Procedures

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(CH2M HILL 2013), describes SOPs and BMPs to be used for the soil investigation activities. SOPs and BMPs are part of the Project and will be implemented and followed throughout the Project.

#### **1.2.5.7 Soil Investigation Schedule and Effort**

The soil sampling activities are estimated to be completed within 12 months of initiation. Subsequent activities to support the future Soil CMS/FS would be undertaken after the completion of the soil sampling activities, which are estimated to be in late 2016 and anticipated to last from 13 to 27 months. Bench scale tests would precede the pilot studies, and each pilot study would be implemented independently to use the same equipment and worker force. The geotechnical evaluation and plant or other biota sampling would be conducted independently of bench scale tests and pilot studies, although these activities could occur concurrently with the bench scale tests and pilot studies.

### **1.3 Environmental Review Process**

DTSC prepared an EIR for the Project in accordance with CEQA. Prior to and throughout the EIR process, DTSC conducted extensive public outreach to ensure that its decision makers and members of the public were informed about the potential for significant adverse effects on the environment from the Project, alternatives to the Project, and related activities. DTSC held multiple meetings with interested Native American Tribal members and the public to ensure their concerns were considered as part of the environmental review and decision-making process.

As required by CEQA Guidelines Section 15375, a NOP is a notice sent by the lead agency to notify the responsible agencies, trustee agencies, the Office of Planning and Research, and involved federal agencies that the lead agency plans to prepare a DEIR for the Project. The purpose of the notice is to solicit information, guidance, and recommendations regarding the scope, focus, and content of the DEIR. A NOP was prepared for the proposed Project and is included as Appendix B of the EIR (see FEIR Volume 3). The NOP identified the Project Site, described the need for and objectives of the Project, and identified the probable environmental effects of the Project. The NOP was circulated to responsible and trustee agencies, federal agencies, Native American Tribes, and interested members of the public. The NOP public comment period began on November 28, 2012, and concluded on January 14, 2013, providing a 45-day comment period. In response to a request for additional time, DTSC extended the comment period to January 18, 2013, yielding an ultimate comment period of 49 days.

Three public scoping meetings were held during the 49-day public comment period. These meetings occurred on December 11, 12, and 13, 2012. The meetings were open to the agencies mentioned above and to any interested organizations and individuals, including Native American Tribes that have expressed interest in the potential effects of soil investigation activities on cultural resources located on the Project Site. Several Native American Tribes were invited to attend the scoping meetings.

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In addition to the NOP scoping meetings, an extensive communication program was conducted with Native American Tribes that included formal meetings with Native American Tribal councils, informal meetings and field visits with cultural resources personnel and Native American Tribal representatives, and solicitation of written comments. Information obtained through the scoping meetings and the subsequent communication program was incorporated into the DEIR.

In accordance with Section 15105 of the CEQA Guidelines, a public review and comment period was provided for the DEIR, beginning on July 7, 2014. After specific requests were received from commenting parties, DTSC extended the mandated 45-day public review period from August 21, 2014, to September 5, 2014, for a total of 60 days.

Two public meetings were held during the public review period to provide an opportunity for public comment. These meetings took place on July 22, 2014, in Needles, California, and July 23, 2014, in Golden Shores, Arizona. Transcripts of the comments received at these public hearings are included as part of the FEIR (see FEIR Volume 1, Chapter 4, “Individual Comments and Responses”).

In April 2015, DTSC exercised its discretion to recirculate the Biological Resources section of the DEIR to afford trustee and responsible agencies, Tribes and the general public an opportunity to review and comment on additional information added to the section after the original public review period (Partially Recirculated DEIR). A Notice of Availability for the Partially Recirculated DEIR was published on April 15, 2015 announcing a 45-day public review period from April 15, 2015 to June 1, 2015. A public meeting was not held during the recirculation period.

## **1.4 General Findings**

### **1.4.1 Certification of the EIR**

In accordance with CEQA, DTSC has considered the effects of the Project on the environment, as shown in the DEIR and FEIR and the whole of the administrative Record prior to taking action to approve the Project. DTSC released the FEIR for a 10-day circulation on August 10, 2015 to commenting agencies and tribes. DTSC has reviewed and considered the DEIR and FEIR and the information relating to the environmental impacts of the Project contained in those documents and has certified that the EIR has been prepared and completed in compliance with CEQA. By these Findings, DTSC ratifies and adopts the conclusions of the FEIR as set forth herein unless otherwise noted. The FEIR and these Findings represent the independent judgment and analysis of DTSC.

### **1.4.2 Recirculation**

CEQA Guidelines Section 15088.5 requires a lead agency to recirculate an EIR for further review and comment when “significant new information” is added to the EIR after public notice is given of the availability of the DEIR but before certification of the FEIR. New information added to an EIR is not “significant” unless the EIR is changed in a way that deprives the public of a meaningful opportunity to comment upon a substantial adverse environmental effect of the project or a feasible way to mitigate or avoid such an effect that the project proponent declines to



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implement. CEQA Guidelines Section 15088.5 provides the following examples of significant new information under this standard:

- A new significant environmental impact would result from the project or from a new mitigation measure proposed to be implemented.
- A substantial increase in the severity of an environmental impact would result unless mitigations are adopted that reduce the impact to a level of insignificance.
- A feasible project alternative or mitigation measure considerably different from others previously analyzed would clearly lessen the environmental impacts of the project, but the project's proponents decline to adopt it.
- The DEIR was so fundamentally and basically inadequate and conclusory in nature that meaningful public review and comment were precluded.

Recirculation is not required where the new information added to the EIR merely clarifies or amplifies or makes insignificant modifications in an adequate EIR. The above standard is not intended to promote endless rounds of revision and recirculation of EIRs (*Laurel Heights Improvement Assn. v. Regents of the University of California* (1993) 6 Cal. 4th 1112, 1132). “Recirculation was intended to be an exception, rather than the general rule” (*Ibid.*).

The FEIR incorporates information obtained by DTSC since the release of the DEIR and the Partially Recirculated DEIR. This information includes comments submitted on the DEIR and Partially Recirculated DEIR, and responses to those comments. After receiving comments on the DEIR and obtaining additional information on biological resources, DTSC exercised its discretion to provide an additional 45-days of public review and comment on the revised Biological Resources section. The DEIR, including the Partially Recirculated DEIR, has been revised in response to comments received, and is included in its entirety, for ease of reference, as Volume 3 of the FEIR. All revisions from the original DEIR are shown in underline and strikethrough.

DTSC has determined that none of the conditions triggering recirculation in CEQA Guidelines Section 15088.5 have been met, although DTSC did decide, in the interest of full disclosure, to recirculate the additional information provided in the biological resources section of the DEIR. The additional revisions made to the DEIR and Partially Recirculated DEIR, including the Errata (FEIR Volume 3, Chapter 12), are for clarification purposes and do not consist of “significant new information” requiring recirculation. Under such circumstances, DTSC finds that any additional recirculation of the DEIR, including the Partially Recirculated DEIR, is not required.

### **1.4.3 Findings Regarding Mitigation Measures**

Except as otherwise stated in these Findings, in accordance with CEQA Guidelines Section 15092, DTSC finds that the environmental effects of the Project will not be significant or will be mitigated to a less than significant level by the adopted mitigation measures. DTSC has substantially lessened or eliminated all significant environmental effects where feasible. DTSC finds there are no additional feasible mitigation measures that would substantially reduce the significant and unavoidable impacts identified in the EIR. DTSC finds that the mitigation

measures incorporated into and imposed upon the Project will not have any significant environmental impacts that were not analyzed in the EIR.

The Hualapai Indian Tribe and the FMIT submitted comment letters on the DEIR that included suggested mitigation measures. The following is a table summarizing each mitigation measure request and reasoning for rejection by DTSC.

#### MITIGATION MEASURE REQUESTS MADE IN RESPONSE TO COMMENTS ON THE DEIR

Mitigation Measure Request	Reasoning for Rejection of Request
Request for a biological survey of riparian habitat be conducted biannually with Tribal representatives and that survey findings of all biological surveys be submitted to the Tribes.	The Project would not impact the entire riparian system that exists in the Topock Cultural Area (TCA), and any impacts to the riparian system would be limited in scale and reduced through Mitigation Measure BR-1. Accordingly, the mitigation measure suggested by the commenter entailing surveys of the entire TCA for the life of soil remediation, if any is required, lacks the constitutionally required nexus and rough proportionality to the Project's impacts (see CEQA Guidelines Section 15041). For this reason, DTSC cannot legally impose such a requirement (see Public Resources Code [PRC], Sections 21081.6, subd. (b), 21004 [CEQA does not expand agency authority to impose conditions]; see also CEQA Guidelines, Section 15126.4, subd. (a)(2), (4) [same].) Additionally, in accordance with Mitigation Measures CR-1a-1 and CR-1d, Interested Tribes are afforded the opportunity to participate in biological surveys and review and comment on all resulting documentation.
Request for mitigation that identifies the nesting bird season from February 15 through August 31; requires that a Tribal monitor be present during the pre-investigation surveys; requires that the surveys be conducted no more than 3 days prior to beginning work; and implements a minimum 300-foot no-disturbance buffer (500 feet for raptors) around active nests using fencing.	<p>The nesting bird season currently described in the FEIR (March 15 through September 30) was taken directly from the <i>Programmatic Biological Assessment for Pacific Gas and Electric Topock Compressor Station Remedial and Investigative Actions</i> (PBA) and the Final Bird Impact Avoidance and Minimization Plan (BIAMP; CH2M Hill 2014); both documents were written based on scientific research and reviewed by U.S. Fish and Wildlife Service (USFWS). In order to retain consistency between the Soil Investigation Project EIR and the PBA, no revisions to the nesting bird season within the mitigation measure will be made. Mitigation Measure BR-4 requires preconstruction field surveys for bird species and, depending on the results of those surveys, that mitigation and avoidance measures in the BIAMP be implemented.</p> <p>Cultural Resources Mitigation Measure CR-1d affords Interested Tribes the opportunity to participate in all scientific surveys, including biological resources surveys, as requested by the commenter.</p> <p>As described in Mitigation Measure BR-4, surveys shall be conducted no more than 72 hours prior to beginning investigation activities. Furthermore, species-specific avoidance buffers shall adhere to Table 6-1 of the BIAMP. The BIAMP is included as an appendix to the FEIR (Volume 3, Appendix J). The BIAMP recommends buffers from 15 feet to 300 feet, depending on the bird species. Species such as Anna's hummingbird and mourning dove would require a 20- to 50-foot buffer, whereas raptors would require a 100- to 300-foot buffer, depending on the species. Applying a general 300-foot buffer for all bird species is impractical and unrelated to the Project's potential impacts. Accordingly, the mitigation measure suggested by the commenter lacks a nexus and rough proportionality to the Project's impacts, and is not required to reduce any significant impacts.</p>
Request that all disturbed areas and storage piles are stabilized to suppress dust by the following typical means: water, organic stabilizers / coverage with a tarp or other suitable material, or vegetative ground cover.	As discussed in the FEIR Volume 3 on page 4.2-11, all work for the Project will comply with Mojave Desert Air Quality Management District Rule 403, which requires that dust emissions from earthmoving activities or any other construction activity be prevented. Many of the dust suppression techniques discussed in the EIR are the same techniques proposed by the comment (e.g., using water for dust suppression). In addition, as discussed in the FEIR Volume 3 on pages 4.6-18 through 4.6-20, prior to any soil investigation activities, an erosion control plan will be prepared and implemented as part of the Project; this plan will include erosion control measures such as hydraulic mulch, straw mulch, and wood mulch, as well as geotextiles, plastic covers, and erosion control mats. The above listed regulations and project features are adequate to ensure that potential environmental impacts from dust are maintained at a less than significant level. To the extent that the suggested mitigation measure proposes dust suppression on surfaces not disturbed by Project activities, the measure would lack a nexus

## MITIGATION MEASURE REQUESTS MADE IN RESPONSE TO COMMENTS ON THE DEIR

Mitigation Measure Request	Reasoning for Rejection of Request
	and rough proportionality to the Project's impacts and cannot be imposed by DTSC.
Request that when soil or similar material is being transported off-site, all material shall be covered or wetted, and that at least six inches of freeboard space from the top of the container shall be maintained. Also requests use of blower devices on-site is prohibited.	As described in the FEIR Volume on pages 4.6-18 through 4.6-20, the Best Management Practices of the Project include many of the dust control measures listed in the suggested mitigation measures, including removing mud track out and covering or wetting soils to limit visible dust. In addition, Mitigation Measure CR-1e-7 requires PG&E to comply with the <i>Management Protocol for Handling and Disposition of Displaced Site Material, Topock Remediation Project, Needles, California</i> (the "Displaced Soil Protocol") in Appendix J of the <i>Soil RCRA Facility Investigation/Remedial Investigation Work Plan</i> (Soil Work Plan).
Request that extent trails be field mapped and documented in consultation with participating tribes, and be preserved	<p>Within Mitigation Measure CR-1c-2, Interested Tribes are afforded the opportunity "to identify, and DTSC to consider, for the purposes of avoidance, any physical features of Tribal significance within the field check area, including but not limited to <i>trails</i>, rock features, desert pavement, and cleared circle areas that might be considered contributors to the TCP" (emphasis added).</p> <p>The extant trails in the TCA have been surveyed and those that may be significant were field-mapped by a qualified archeologist as part of various inventory and survey efforts conducted in and around the Station. Specifically, the extant trails in the TCA were recorded during a survey conducted in 2004 when the Department of Interior expanded the Area of Potential Effects ("APE"). The trail segments were field mapped by a qualified archaeologist (McDougall and Horne 2007). The Tribes were invited to monitor the mapping exercise; the Chemehuevi Tribe was the only Tribe present to monitor the mapping exercise. The mapping covered the proposed Project boundary; therefore no further mapping is required as a result of the Soil Investigation Project. As a result of the mapping for the efforts described, it was determined that the proposed Project would not disturb any trails identified by the mapping. Further, even if the Project were to disturb a trail, the Project would not disturb all trails in the Topock Cultural Landscape. For this reason, the mitigation measure suggested by the commenter of field mapping all trails in the Topock Cultural Landscape and preservation of all such trails lacks a nexus and rough proportionality to the Project's identified impacts (see CEQA Guidelines Section 15041). DTSC would not be able to legally impose such a requirement (see PRC, Sections 21081.6, subd. (b) and 21004 [CEQA does not expand agency authority to impose conditions]; CEQA Guidelines, Section 15126.4, subd.(a)(2),(4) [same]).</p>
Request that the entire Topock Cultural Landscape be field mapped and preserved, in consultation with participating tribes.	The portions of the TCA that the Project may disturb have been field surveyed and significant cultural resources were mapped by a qualified archeologist. The Tribes were invited to monitor the mapping and the Chemehuevi Tribe did so. No additional mapping is required. The archeologist identified significant cultural resources, which would be avoided. The Project has been designed to avoid direct physical impact to known prehistoric resources and Mitigation Measure CR-2 provides for the treatment of any unknown resources that may be encountered as a result of the Project. In the event that the Project disturbs a significant cultural resource, the resource would be treated in accordance with the requirements from the agencies and CEQA (PRC, Section 21083.2).
Request that DTSC provide financial support for tribal interpretive centers and associated programs.	This suggested mitigation measure does not have a nexus or rough proportionality to the significant adverse impacts of the Project to the physical environment (see CEQA Guidelines Section 15041). The comment does not provide evidence to establish that the proposed Project may undermine the public or the Tribes' awareness of the Tribes' cultural heritage, and explain how the project would cause reasonably foreseeable significant adverse effects on the physical environment. Further, the evidence does not demonstrate a rough proportionality between the scope of the impacts of the Project and request to provide financial support for tribal interpretive centers (see CEQA Guidelines, Section 15126.4, subd. (a)(4) [there must be an "essential nexus between the mitigation measure and a legitimate government interest," and the measure must be "roughly proportional to the impacts of the project"]).
Request continuation of compensation for tribal participation in monitoring, attending meetings, and participating in project development, as with the present	Mitigation Measures CR-1e-8 and CR-1e-9 specify that the open grant funding for the TRC and TRC itself will continue through the Project at least until the selection of the soil remedy, if any, and/or construction phase of the groundwater remedy. DTSC will determine the appropriate mitigation measures for the Soil Remediation Project if one is deemed needed in the future, when that project is proposed and

## MITIGATION MEASURE REQUESTS MADE IN RESPONSE TO COMMENTS ON THE DEIR

Mitigation Measure Request	Reasoning for Rejection of Request
Consultative Work Group, Technical Work Group, Clearinghouse Task Force, and subcommittee involvement through the life of the remediation clean up project.	DTSC analyzes its potential significant environmental impacts. To the extent that the suggested mitigation measure proposes mitigation for potential future projects, including the Soil Remediation Project, but not the Project at issue, the measure lacks a nexus and rough proportionality to the Project's impacts and cannot be imposed by DTSC (see CEQA Guidelines, Section 15041).
Request a trust fund for a Cultural Preserve at Topock.	The mitigation measure does not have a nexus, nor would it be roughly proportional, to the identified significant adverse impacts of the Project. It is therefore unable to be constitutionally imposed as a mitigation measure by DTSC (see <i>Nollan v. California Coastal Commission</i> , 483 U.S. 825 (1987); <i>Dolan v. City of Tigard</i> , 512 U.S. 374 [1994]). The establishment of a "Cultural Preserve" outside of the Project area would not mitigate any of the significant adverse impacts of the Project to the physical environment. The Project also will not permanently remove or otherwise develop surface lands within the Project area as would a commercial, retail, or other types of permanent buildings for which a similar open space or agricultural preservation measure could be required (see CEQA Guidelines, Section 15041 [mitigation under CEQA must have a nexus and rough proportionality to the project impacts]; see also CEQA Guidelines, Section 15126.4, subd. (a)(4) [there must be an "essential nexus between the mitigation measure and a legitimate government interest," and the measure must be "roughly proportional to the impacts of the project"]]). This is the same reason DTSC rejected a similar mitigation request made during the Groundwater Remediation EIR process (see 2011 CEQA Findings of Fact and Statement of Overriding Considerations, pages 39 through 40.)
Request funding for increased security measures around the Topock Cultural Landscape.	This suggested mitigation measure lacks a nexus or rough proportionality to the significant adverse impacts of the Project to the physical environment (see CEQA Guidelines, Section 15041.) There is no evidence that the proposed Project will increase tourism, trespassing, or vandalism in the area. There also is no evidence linking PG&E's work in the area and the vandalism at Grapevine Canyon. Because the Project would not cause a reasonably foreseeable increase in tourism, the EIR cannot require such mitigation (see CEQA Guidelines, Section 15126.4, subd. (a)(4) [there must be an "essential nexus between the mitigation measure and a legitimate government interest," and the measure must be "roughly proportional to the impacts of the project"]]).
Request funding support for education and technical training for tribal members.	The suggested mitigation measure lacks a nexus and rough proportionality to the identified impacts of the Project (see CEQA Guidelines, Section 15041). The funding of education for members of the Hualapai Tribe, while a benefit to the Hualapai Tribe, would not mitigate any significant adverse impacts of Project activities on the physical environment of the TCA beyond what can be despite the worthy nature of the request, DTSC would be unable to legally impose such a requirement on PG&E (see PRC, Sections 21081.6, subd. (b), 21004 [CEQA does not expand agency authority to impose condition]; CEQA Guidelines, Section 15126.4, subd.(a)(2),(4) [same]).
Request that Mitigation Measure CR-1a-2 mention that the FMIT retains the ability to manage access on the parcel it owns in fee.	Pursuant to the 2006 Settlement Agreement between the FMIT and DTSC, the FMIT agreed that the "Tribe will not object to DTSC and its authorized representatives otherwise exercising its authority to enter and move safely about the Former MWD Property at all reasonable times for purposes of ensuring compliance with laws, regulations and requirements." The soil investigation activities proposed for the FMIT's property are required by DTSC to ensure the ability of DTSC and PG&E to gather information that may be necessary for protection of health, safety and the environment.
Request that Mitigation Measure CR-1b: Worker Education Program have a time window for when new personnel receive training and that workers who have not yet been, but may be, assigned to an on-site activity, receive training.	Mitigation Measure CR-1b requires that "an initial sensitivity training session shall be provided by PG&E to all Project employees, contractors, subcontractors, and other professionals <i>prior to their involvement in any ground-disturbing activities</i> [emphasis added], with subsequent training sessions to be held as new personnel become involved in the Project." This text adequately addresses the concern and no further response is warranted.
Request additions to Mitigation Measure CR-1e-8.	The requested additions to mitigation measure CR-1e-8 are not necessary to avoid or substantially lessen a significant adverse impact of the Project on the physical environment. The first proposed addition, to extend the Technical Review Committee (TRC) "into Soil and Groundwater Remedies implementation (e.g.,

## MITIGATION MEASURE REQUESTS MADE IN RESPONSE TO COMMENTS ON THE DEIR

Mitigation Measure Request	Reasoning for Rejection of Request
	such as 5 years after remedy is fully operational)," is deemed unnecessary by DTSC at this time. If the soil investigation concludes that a soil remedy is needed, the applicability and continuation of the TRC for the soil remedy would be addressed at that time during the CEQA process. The second proposed addition states that "the necessity and dollar value of the TRC shall be assessed by PG&E, DTSC, and the Tribes." The TRC is required by CR-1e-8 to remain funded through the soil remedy selection or the construction phase of the groundwater remedy (whichever comes later). At that time, the measure provides that PG&E will assess the necessity and dollar value of the TRC and, with the approval of DTSC, extend, reduce, or terminate the TRC.
Request additions to Mitigation Measure CR-1e-9.	The requested additions to mitigation measure CR-1e-8 are not necessary to avoid or substantially lessen a significant adverse impact of the Project on the physical environment. The first proposed addition, to extend the Open Grant Funding (OGF) "into Soil and Groundwater Remedies implementation (e.g., such as 5 years after remedy is fully operational)," is deemed unnecessary by DTSC at this time. If the soil investigation concludes that a soil remedy is needed, the applicability and continuation of the OGF for the soil remedy would be addressed at that time during the CEQA process. The second proposed addition states that the necessity and dollar value of the OGF shall be assessed by PG&E, DTSC, "and the Tribes." The OGF is required to remain funded through the soil remedy selection or the construction phase of the groundwater remedy (whichever comes later). At that time, the measure provides that PG&E will assess the necessity and dollar value of the OGF and, with the approval of DTSC, extend, reduce, or terminate the OGF.
Suggests a general method to reduce visual impacts that involves assessing visual contrasts at a certain (unidentified) time from Project completion, making an assessment with tribal input, then developing restoration measures to reduce aesthetic impacts remaining from the proposed Project at a future time.	This comment suggests a form of mitigation involving monitoring and restoration for aesthetic impacts. Mitigation for aesthetic impacts is not warranted because DTSC did not find a significant adverse aesthetic impact requiring mitigation.

## 1.5 Findings of Fact

DTSC has reviewed, and certified as adequate, the FEIR for the Topock Compressor Station Soil Investigation Project, which consists of the following: (1) a revised version of the DEIR incorporating changes accepted by the lead agency and provided as Volume 3; (2) comments and recommendations received on the DEIR either verbatim or in summary provided in Volume 1; (3) a list of persons, organizations, and public agencies commenting on the DEIR provided in Volume 1; (4) responses of the lead agency to significant environmental points raised in the review and commenting process for the DEIR found in Volume 1; (5) comments and recommendations received on the Partially Recirculated DEIR either verbatim or in summary provided in Volume 2; (6) a list of persons, organizations, and public agencies commenting on the Partially Recirculated DEIR provided in Volume 2; (7) responses of the lead agency to significant environmental points raised in the review and commenting process for the Partially Recirculated DEIR provided in Volume 2; (8) the MMRP, located in Chapter 11 of Volume 3; and (9) an Errata, and Figure 12-1 to the Errata, which considers a DOI preferred alternative access route and a minor addition to the haul routes within Bat Cave Wash located in Chapter 12 of Volume 3. DTSC has considered the entire Record for the Project, which is described

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previously in Section 1.1.1, “Documents Used as a Basis for Findings and Approval of the Project.”

For each significant effect identified in the EIR, DTSC must make one or more of the Findings listed in Public Resources Code Section 21081 and CEQA Guidelines Section 15091 (see Section 1.1.1).

DTSC hereby makes the following Findings regarding the significant adverse effects of the Project, pursuant to Public Resources Code Section 21081 and Section 15091 of the CEQA Guidelines.

### **1.5.1 Findings Regarding Environmental Effects Found Not to Be Significant**

Effects of the Project that are found to be less than significant, and that require no mitigation, are identified in the bulleted list below. The impact title and number follow the impact title and number conventions used in the DEIR and FEIR. DTSC has reviewed the Record and agrees with the conclusion that the following impacts would not be significant adverse impacts under the Project, despite the contrary opinions of some commenters, and therefore no additional Findings are needed.

- **Aesthetics (Impact AES-1, Section 4.1) – Substantial Adverse Effects on Scenic Vistas.** The Project would not have a substantial adverse effect on a scenic vista, defined as a distant public view along or through an opening or corridor that is recognized and valued for its scenic quality. A substantial adverse effect on a scenic vista was defined as circumstances in which construction or operational activities would introduce long-term or permanent dominant visual elements that, based on the landscape sensitivity level, would result in noticeable to very noticeable changes in the visual character of a vista viewshed that do not blend and are not in keeping or are incompatible with the existing visual environment. The EIR found this impact less than significant because the Project would not be visible from a Designated State Scenic Highway and would only be temporarily visible along I-40, an Eligible State Scenic Highway. The nature, scope, and relatively short time frame for implementation of the Project was therefore found not to substantially affect the existing landscape character as seen from Scenic Vistas. No mitigation is required.
- **Aesthetics (Impact AES-2, Section 4.1) – Substantial Damage to Scenic Resources within a State Scenic Highway.** The Project would not substantially damage scenic resources, including trees, rock outcroppings, or historic buildings, within a State Scenic Highway because, as noted above, the Project was found not to permanently or substantially alter the existing visual quality or character of the site and its surroundings. This impact would be less than significant. No mitigation is required.
- **Aesthetics (Impact AES-3, Section 4.1) – Substantial Degradation of Existing Visual Character or Quality.** The Project would introduce incremental change comparable in height and character to the existing built elements in the landscape and as such would not

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substantially degrade the existing visual character of the Project Site. This impact would be less than significant. No mitigation is required.

- Aesthetics (Impact AES-4, Section 4.1) – Substantial Light and Glare. The Project would not create a new source of substantial light or glare that would adversely affect day or nighttime views in the area. This impact would be less than significant. No mitigation is required.
- Aesthetics (Impact AES-5, Section 4.1) – Consistency with Plans and Policies. The Project would not conflict with any applicable plans or policies adopted for purposes of protecting visual resources. This impact would be less than significant. No mitigation is required.
- Air Quality (Impact AIR-1, Section 4.2) – Potential to generate emissions of criteria air pollutants. The Project would not exceed the Mojave Desert Air Quality Management District daily or annual thresholds of significance. The Project would not violate any air quality standard or contribute substantially to an existing or projected air quality violation, and it would not result in a cumulatively considerable net increase of any nonattainment pollutant. This impact would be less than significant. No mitigation is required.
- Air Quality (Impact AIR-2, Section 4.2) – Potential to expose sensitive receptors to substantial pollutant concentrations. The Project would not emit carbon monoxide in quantities that would pose health effects. The duration of soil investigation activities would constitute a small percentage of the total 70-year sensitive receptor exposure period for toxic air contaminants. The Project would not expose sensitive receptors to substantial pollutant concentrations. This impact would be less than significant. No mitigation is required.
- Biological Resources (Impact BR-2, Section 4.3) – Impacts to Special-Status Plant Species. Implementation of the Project would not affect special-status plants. Mousetail suncup is the only special-status plant species that was observed within the Project Site. However, there are no Project activities planned in areas where Mousetail suncup is established. [For this reason, this impact would be less than significant. No mitigation is required.
- Biological Resources (Impact BR-3, Section 4.3) – Direct Disturbance of and Loss of Habitat for Special-Status Invertebrate Species. Implementation of the Project could affect special status invertebrates, specifically the MacNeill’s sootywing skipper, either directly or through habitat modifications. Impacts to MacNeill’s sootywing skipper habitat at East Ravine would be minimal as all work will be completed by hand and access to each pore water sampling site would be by boat or by foot. This impact would be less than significant. No mitigation is required.
- Biological Resources (Impact BR-9, Section 4.3) – Fish Mortality, Interference with Spawning Habitat, and Other Adverse Aquatic Effects. Increased sedimentation and turbidity and the release of contaminants during Project activities could adversely affect fish habitat and movement in the Colorado River. This impact would be less than significant. No mitigation is required.

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- Biological Resources (Impact BR-10, Section 4.3) – Consistency with Regional and Local Plans. Implementation of the Project would not have substantial adverse effects on the viability of populations of species covered in the Lower Colorado River Multi-Species Conservation Program (LCR MSCP), the effectiveness of the LCR MSCP’s conservation strategy, and attainment of the goals and objectives of the LCR MSCP. Additionally, the Project would not conflict with resource management goals of the USFWS, BLM, or DOI. This impact would be less than significant. No mitigation is required.
  - Hazards and Hazardous Materials (Impact HAZ-1, Section 4.5) – Create a significant hazard to the public or the environment through reasonably foreseeable upset and accident conditions involving the release of hazardous materials into the environment. Implementation of the Project would not result in a significant adverse impact from the release of hazardous materials related to use of equipment (fuels, oils and grease, solvents) or from the release of chemicals from the sampled media at hazardous levels. As described in the EIR and Conditions of Approval of the Project, the access and sampling activities that could result in the release of chemicals require compliance with various SOPs and BMPs, in addition to compliance with local, state, and federal laws. This impact would therefore be less than significant. No mitigation is required.
  - Hazards and Hazardous Materials (Impact HAZ-2, Section 4.5) – Effects related to existing hazardous waste site. The Station is a listed hazardous waste site. Implementation of the Project would not create a significant hazard to the public or the environment through the potential release of contaminants known to be present in soil and groundwater at and beneath the Station. As described in the EIR and Conditions of Approval of the Project, the access and sampling activities that could result in the release of contaminants require compliance with various SOPs and BMPs, in addition to compliance with local, state, and federal laws. This impact would be less than significant. No mitigation is required.
  - Hazards and Hazardous Materials (Impact HAZ-3, Section 4.5) – Increased Risk of Wildland Fires. Soil investigation equipment that uses internal combustion engines could ignite wildland fires that could expose people or structures to significant risk. However, the California Department of Forestry and Fire Protection (CAL FIRE) fire hazard severity zone map identifies the Project Site as within the lowest level of its fire hazard severity zones, which is the lowest possible risk category. Moreover, the Project would adhere to substantive provisions of federal and state regulations that address spark-arrester protection to prevent potential wildland fire impacts. This impact would be less than significant. No mitigation is required.
  - Hydrology and Water Quality (Impact HYDRO-1, Section 4.6) – Exceedance of Water Quality Standards. Implementation of the Project would not result in the exceedance of water quality standards or otherwise substantially degrade water quality as a result of releasing contaminants or sediment from waste soil into the environment. As described in the EIR and Conditions of Approval of the Project, the grading and sampling activities that could result in the degradation or violation of water quality standards require compliance



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with various SOPs and BMPs, in addition to compliance with local, state, and federal laws. This impact would be less than significant. No mitigation is required.

- Hydrology and Water Quality (Impact HYDRO-2, Section 4.6) – Substantially Deplete Groundwater Supplies or Interfere Substantially with Groundwater Recharge. The soil investigation activities would use water from the Station’s water supply system. The source of this water is groundwater. The use of this water could deplete groundwater supplies; however, the estimated volume of water use would be within the Station’s allotment. This impact would be less than significant. No mitigation is required.
- Hydrology and Water Quality (Impact HYDRO-3, Section 4.6) – Increased Erosion, Runoff, or Drainage Pattern Alterations. Access improvement and site preparation associated with implementation of the Project would not disturb surface soil, underlying soil, runoff water, or existing drainage patterns, which could increase erosion, siltation, surface runoff, or flooding. As described in the EIR and Conditions of Approval of the Project, the grading and ground disturbance activities that could disturb soil or alter drainage patterns such that rain events could result in the discharge of polluted runoff to drainages and eventually to the Colorado River require compliance with various SOPs and BMPs, in addition to compliance with local, state, and federal laws. This impact would be less than significant. No mitigation is required.
- Noise (Impact NOI-2, Section 4.7) – Potential to expose persons to or generate excessive ground-borne vibration or any related ground-borne noise levels. The Project would use equipment that would not exceed Federal Transit Administration criteria for generation of ground-borne vibration. The Project would not generate excessive ground-borne vibration and therefore any related ground-borne noise levels. This impact would be less than significant. No mitigation is required.

Finally, as required by Section 15128 of the CEQA Guidelines, the EIR contains a brief discussion stating the reasons that various possible effects of a project were determined not to be significant and were not discussed in detail in the EIR. In accordance with the CEQA Guidelines, this section of the EIR discusses the following issue areas: Agricultural Resources, Energy Resources, Geology and Soils, Greenhouse Gas Emissions, Land Use Planning, Mineral Resources, Population and Housing, Public Services, Recreation, Transportation and Traffic, and Utilities and Service Systems (see FEIR Volume 3, pages 5-6 through 5-21).

### **1.5.2 Findings Regarding Significant Effects of the Project**

The EIR identified a number of significant environmental effects (or impacts) that the Project would cause or contribute to. Some of these significant effects can be avoided or reduced to a less than significant level through the adoption of feasible mitigation measures. Other effects are significant and unavoidable. Some of these unavoidable significant effects can be substantially lessened by the adoption of feasible mitigation measures. Other significant, unavoidable effects cannot be substantially lessened. For reasons set forth in the Statement of Overriding Considerations in Section 1.7 of this document, however, DTSC has determined that overriding

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economic, social, and other considerations outweigh the significant and unavoidable effects of the Project.

DTSC has reviewed the Record and has determined that some of the Project impacts would be significant, and therefore require Findings pursuant to Public Resources Code Section 21081 and CEQA Guidelines Section 15091. DTSC's Findings with respect to the Project's significant effects and mitigation measures are set forth in the table attached to these Findings as **Table 1**. This table does not describe the full analysis of each environmental impact contained in the EIR. Instead, the table provides a summary description of each impact, describes the applicable mitigation measures adopted by DTSC, and states DTSC's Finding for each impact. A full explanation of the environmental impacts can be found in the FEIR. In making these Findings, DTSC incorporates the analysis and explanation in the FEIR in these Findings, except to the extent any such determinations and conclusions are specifically and expressly modified.

### 1.5.3 Growth Inducement

CEQA requires that an EIR must discuss ways in which the project could foster economic or population growth or the construction of additional housing, either directly or indirectly, in the surrounding area (CEQA Guidelines, Section 15126.2[d]). Induced growth is any growth that exceeds planned growth and results from new development that would not have taken place in the absence of a project. A project can be determined to have a growth-inducing impact if it directly or indirectly causes economic or population expansion through the removal of obstacles to growth or encourages or facilitates other activities that could significantly affect the environment—actions that are sometimes referred to as “growth accommodating.”

The Project would involve soil investigation activities that are temporary and short-term in nature. Soil sampling field investigation activities would require a maximum of 13 employees plus agency oversight personnel, an archaeological monitor, and Tribal monitors. The bench scale tests would require two employees for 3 months, the pilot studies would each require up to three employees for 10 months, the geotechnical evaluations would require up to three employees for 2 months, and the plant or other biota sampling would require two workers for up to 2 months. The Project would not result in the creation of new residences on or adjacent to the Project Site. The anticipated employment, both direct and indirect, generated by the Project is evaluated in FEIR Volume 3, Section 5.3.7, “Population and Housing.” No new residents are anticipated as a result of the soil investigation activities associated with the Project, so no increase in growth would occur as a result of the soil investigation activities.

The Project Site is currently served by existing roadways, utilities, and public services, and no additional off-site infrastructure is anticipated. Implementation of the Project would not result in primary or secondary environmental effects related to additional growth. No impact would occur (see FEIR Volume 3, pages 5-21 through 5-22).

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### 1.5.4 Significant Irreversible Environmental Effects

Section 21100(b)(2)(b) of the Public Resources Code and Section 15126.2(c) of the CEQA Guidelines require that an EIR analyze the extent to which the proposed project's primary and secondary effects would affect the environment and commit nonrenewable resources to uses that future generations would not be able to reverse. "Significant irreversible environmental changes" include the use of nonrenewable natural resources during the initial and continued phases of the project, should this use result in the unavailability of these resources in the future. Primary impacts and, particularly, secondary impacts generally commit future generations to similar uses. Also, irreversible damage can result from environmental accidents associated with projects. Irretrievable commitments of these resources are required to be evaluated in an EIR to ensure that such consumption is justified (CEQA Guidelines Section 15126.2(c)).

Per Section 15126.2(c) of the CEQA Guidelines, a project would result in an irreversible and irretrievable commitment of resources if it:

- Involved a large commitment of nonrenewable resources
- Created primary and secondary impacts that would generally commit future generations to similar uses
- Involved uses in which irreversible damage would result from any potential environmental accidents associated with the project
- Proposed consumption of resources that were not justified (e.g., the project involves the wasteful use of energy)

Soil sampling activities are anticipated to last up to 12 months (9 months of active field investigation) with a potential extension of up to 3 months for 25 percent contingency samples. Subsequent activities to support the Soil CMS/FS would be undertaken after the completion of the soil sampling activities in 2016 and are anticipated to last from 13 to 27 months, depending on the need for each activity and ability for each activity to be implemented concurrently. The consumption and use of nonrenewable resources, as contemplated in CEQA Guidelines Section 15126.2, subdivision (c), is considered temporary for the purposes of this discussion because of the nature of the Soil Investigation Project, which is necessary to ensure protection of the environment. The Project does not commit substantial amounts of resources, and the amount of energy and equipment to be used is limited to that needed for the investigation, so there is no irreversible commitment of nonrenewable resources or related significant impact.

Soil investigation activities associated with the Project could potentially disturb cultural resources within the Project Site. Site clearing and grading, drilling, boring activities, and pilot studies have the potential to uncover archaeological and paleontological resources. Despite application of mitigation measures to reduce potential impacts to less than significant levels, including the priority to avoid cultural resources and preservation of resources in place, activities involving data recovery or capping of cultural resources discovered during soil investigation activities could result in irreversible losses. Data recovery requires removal of artifacts from their original

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context. Capping involves covering an archaeological site with fill such that Project activities could take place unimpeded over the area. Because both methods would disturb the overall Topock archaeological area to differing degrees, DTSC recognizes that there would be some irreversible and irretrievable impacts to cultural resources (see FEIR Volume 3, pages 5-5 through 5-6).

## 1.6 Findings Regarding Alternatives to the Project

An EIR must “describe a range of reasonable alternatives to the project . . . which would feasibly attain most of the basic objectives of the project but would avoid or substantially lessen any of the significant effects of the project, and evaluate the comparative merits of the alternatives” (CEQA Guidelines, Section 15126.6, subd. (a)). Although an EIR must evaluate a reasonable range of potentially feasible alternatives, it is up to the agency decision-making body may to ultimately determine whether a potentially feasible alternative is actually infeasible (*California Native Plant Society v. City of Santa Cruz* (2009) 177 Cal.App.4th 957, 999). Grounds for such a conclusion might be the failure of an alternative to satisfy a basic fundamental project objective, or objectives deemed important by the agency decision makers, or the fact that an alternative fails to promote policy objectives of concern to such decision makers (*Id.* at pages 992, 1000–1003). Thus, even if a project alternative will avoid or substantially lessen any of the significant environmental effects of a proposed project as mitigated, the decision makers may reject the alternative for such reasons, including “desirability.”

Under CEQA Guidelines Section 15126.6, the alternatives to be discussed in detail in an EIR should be able to “feasibly attain most of the basic objectives of the project[.]” For this reason, the objectives described in the DEIR (see FEIR Volume 3, Section 3.4) and in Section 1.2.3 of these Findings provided the framework for defining possible alternatives. The selection of alternatives took into account the project objectives, and primary consideration was given to alternatives that would reduce any of the project’s significant impacts while still meeting most of the project objectives.

As described in the FEIR Volume 3, Section 3.4, the primary and fundamental objective of the soil investigation activities is to gather sufficient soil samples to be able to reliably characterize the nature and extent of soil and sediment contamination within the Project Site. If approved, soil and sediment would be analyzed for COPCs previously identified in the Project Site (inside and outside the Station fence line) that resulted from historical Station practices, as informed by prior soil sampling. This would enable completion of the Final RFI/RI Report Volume 3 (Soil) and risk assessment as required by the 1996 Corrective Action Consent Agreement as soon as practicable and consistent with applicable state laws and regulations. Additional Project objectives include:

- Finalizing the evaluation of soil properties and contaminant distribution to support preparation of the future Soil CMS/FS, including gathering a sufficient level of information to identify a range of remedial alternatives.
- Assessing whether soil contaminant concentrations pose a threat to groundwater.

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- Assessing whether soil and sediment contamination have the potential to migrate off-site and, if so, gathering sufficient information to assess measures that may be required to prevent and minimize such migration to ensure protection of health, safety, and the environment.

The soil investigation activities do not predetermine remedial design options or alternatives. Rather, the data collected from implementation of the Project would be combined with the existing data sets to address the Data Quality Objectives (DQOs) outlined in the Soil Work Plan and inform DTSC if additional action or remediation is necessary for the identified investigation areas. The investigation of soil would also inform and enable, if necessary, the evaluation and selection of corrective measures in a future Soil CMS/FS.

As such, the range of alternatives considered in the EIR was made up of three alternatives to the proposed Project that feasibly attain most of the basic objectives of the Project. These criteria and other factors, expressed in the EIR, resulted in the determination that the alternatives considered represented a reasonable range (for further information concerning project alternative selection, see the FEIR Volume 3, Section 7.2). The alternatives considered in the EIR are presented and summarized in the following pages. In addition, the feasibility of each of the alternatives evaluated in the EIR is determined in the following pages.

## **1.6.1 Reduction of Project Footprint Alternative (Avoid Mouth of Bat Cave Wash)**

### ***1.6.1.1 Summary of Reduction of Project Footprint Alternative***

Under the Reduction of Project Footprint Alternative, all Project activities that are proposed at the mouth of Bat Cave Wash would be avoided. This includes avoiding 23 sampling locations in AOC 1, at the mouth of Bat Cave Wash, as well as any contingency sampling locations that might otherwise be deemed needed (as part of the 25 percent contingency) at the mouth of Bat Cave Wash. Rotasonic drilling would be the primary technique used in this location under the Project; in addition, a limited number of samples may be collected by hoe or excavator and hand tools, with an estimated disturbance diameter of less than 50 feet in any one direction from the sample location, and some trimming of the tamarisk for access. Under this alternative, however, all activities within the mouth of Bat Cave Wash would be avoided.

The Reduction of Project Footprint Alternative would reduce but not eliminate the Project's significant and unavoidable impacts to cultural resources and significant and unavoidable noise impacts as described below.

- **Cultural Resources.** CEQA impacts and significance determinations for cultural resources would be the same as described for the proposed Project. This alternative would somewhat reduce the extent of impacts within the Topock Traditional Cultural Property (TCP) by reducing the Project footprint. However, the Reduction of Project Footprint Alternative would nevertheless result in a significant and unavoidable impact within the Topock TCP. Significant impacts to soil and vegetation, which are contributors to the TCP, would still

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occur, as described for the Project in the FEIR Volume 3, Section 4.4, “Cultural Resources.” The temporary presence of equipment, workers, and vehicles during soil sample collection would introduce activities that are inconsistent with the natural setting associated with the Topock TCP and are considered significant disturbances that would materially affect the cultural values ascribed to the TCP by several Interested Tribes.

Implementation of the Reduction of Project Footprint Alternative would not avoid or substantially lessen the impact to known historical resources relative to the Project. As with the Project, 16 known historical resources would be avoided through Project design and an additional 3 historical resources (CA-SBR-2910H, -6693H, and the Topock Station) would not be significantly impacted.

Potential impacts to unknown historical and unique archaeological resources from the Reduction of Project Footprint Alternative would be slightly reduced relative to the Project because the Project footprint would be reduced; however, because there remains a potential to impact unknown historical or unique archaeological resources, this incremental difference would not change the conclusion that the impacts of the Reduction of Project Footprint Alternative to unknown historical and unique archaeological resources would be significant and unavoidable.

Potential impacts to paleontological resources from the Reduction of Project Footprint Alternative would be slightly reduced relative to the Project because the Project footprint would be reduced; however, this incremental difference would not be substantial and impact avoidance mitigation measures would still be required, as recommended in the FEIR.

Potential impacts to human remains from the Reduction of Project Footprint Alternative would be slightly reduced relative to the Project because the Project footprint would be reduced; however, because there remains a potential to impact as yet unknown human remains, this incremental difference would not change the conclusion that the impacts of the Reduction of Project Footprint Alternative to human remains would be significant and unavoidable.

- **Noise.** The Reduction of Project Footprint Alternative would result in reduced duration of noise exposure in comparison to the Project by removing 23 sample locations at the mouth of Bat Cave Wash. Although this approach would result in some reduction in the duration of substantial noise, it would not reduce the significant unavoidable noise impact to less than significant because noise levels from other investigative site locations would continue to result in a substantial increase over existing baseline average ambient noise levels.

The Reduction of Project Footprint Alternative would also reduce or have similar impacts to the following Project impacts as described in the FEIR. While several of these impacts would be reduced when compared with the effects of the Project, these impacts can be reduced to a less than significant level through implementation of mitigation.

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- **Aesthetics.** The Reduction of Project Footprint Alternative would result in reduced visual effects in comparison to the Project by removing investigation activities in the densely vegetated area of Bat Cave Wash, which would also avoid the trimming, pruning, or clearing of vegetation that would be necessary to accomplish this sampling. However, aesthetic effects associated with the Project were determined to be less than significant, so this alternative would not serve the purpose of avoiding or substantially lessening a significant adverse environmental effect of the Project.
  - **Air Quality.** The Reduction of Project Footprint Alternative would result in reduced annual air pollutant emissions in comparison to the Project by removing 23 drilling sample activities. The maximum daily emissions would likely be similar to the Project. However, daily and annual air pollutant emissions associated with the Project were determined to be less than significant, so this alternative would not serve the purpose of avoiding or substantially lessening a significant adverse environmental effect of the Project.
  - **Biological Resources.** Under the Reduction of Project Footprint Alternative, impacts to Salt Cedar habitat and resources under the jurisdiction of the U.S. Army Corps of Engineers, California Department of Fish and Wildlife, and Regional Water Quality Control Board, which include foraging and/or nesting areas for both common and special-status birds and foraging habitat for bats, would be avoided within Bat Cave Wash. This would reduce the overall impact of the Project. Impacts may still occur to nesting birds, bats, jurisdictional resources, and riparian vegetation in other parts of the Project Site; however, these impacts will be reduced to less than significant levels through implementing mitigation measures as described in the FEIR.
  - **Hazards and Hazardous Materials.** The Reduction of Project Footprint Alternative would eliminate the assessment of soil contamination and soil migration in the heavily vegetated area at the mouth of Bat Cave Wash. If the Reduction of Project Footprint were implemented, potentially harmful soil containing COPCs in this area could continue to pose a threat to the protection of health, safety, and the environment; thus, this alternative could result in a potentially significant impact to the environment from hazards and hazardous materials that would not be realized under the proposed Project. Alternatively, DTSC could pursue cleanup of soil in this area based on the limited data they currently have. That future remediation project may, therefore, be more extreme than necessary if it were based on conservative assumptions about the extent of the contamination.
  - **Hydrology and Water Quality.** The proposed Project would not exceed water quality standards or increase drainage or erosion potential because the Project Description and Soil Work Plan include SOPs and BMPs to prevent these types of impacts from occurring. In addition, the Project would require the adherence to the substantive provisions of applicable local, state, and federal laws. The Reduction in Project Footprint Alternative would include similar SOPs and BMPs as the proposed Project. Therefore, the Reduction in Project Footprint Alternative would result in impacts to hydrology and water quality similar to the proposed Project.

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### **1.6.1.2 Conclusion**

As stated in Section 1.2.3, the primary and fundamental objective of the Soil Investigation Project is to gather sufficient information to be able to reliably characterize the nature and extent of soil and sediment contamination within the Project Site. Soil and sediment will be analyzed for COPCs previously identified in the Project Site (inside and outside the Station fence line) that resulted from historical Station practices, thereby enabling completion of the Final RFI/RI Report Volume 3 (Soil) and risk assessment as soon as practicable and consistent with applicable state law. Soil borehole and surface sediment samples previously collected just within or at the margins of the heavily vegetated area at the mouth of Bat Cave Wash exceeded the indicated background or action levels for seven COPCs (total chromium, Cr(VI), arsenic, copper, lead, molybdenum, and zinc).

These analytical results indicate that surface soil and sediment in and adjacent to the heavily vegetated area is known to have chemical concentrations above background and action levels. No samples have been collected from within the inner portions of the area. If DTSC were to eliminate sampling in this area, the information necessary to fully evaluate the nature and extent of contamination known to be present in this area would not be collected and the fundamental objectives of the Project would not be met. Having incomplete data would affect the accuracy and effectiveness of future remediation planning efforts, including but not limited to reducing the accuracy of the soil risk assessment and jeopardizing the effective design of remedial alternatives in this area. Characterization of the nature and extent of soil and sediment contamination at the mouth of Bat Cave Wash is fundamental to understanding whether contaminant concentrations in that area pose a threat to groundwater and have the potential to migrate off-site. The alternative of avoidance of soil and sediment sampling at the mouth of Bat Cave Wash would therefore not meet the fundamental Project objective.

DTSC therefore rejects this alternative as impracticable and undesirable from a policy standpoint and, therefore, infeasible within the meaning of CEQA. Specifically, DTSC must be able to collect samples in this area to identify and complete a future Soil CMS/FS that is protective of human health, safety, and the environment, as DTSC is charged with protecting. While the Reduction of Project Footprint Alternative is the environmentally superior alternative among the alternatives analyzed, it does not meet the fundamental project objective, which is gathering sufficient information to be able to reliably characterize the nature and extent of soil and sediment contamination within the Project Site.

In addition, because the Reduction of Project Footprint Alternative would eliminate the assessment of soil contamination and soil migration in the mouth of Bat Cave Wash (an area where samples previously taken just within or at the margins contained COPCs), implementation of this alternative could cause potentially harmful soil containing COPCs to continue to pose a potential threat to health, safety, and the environment through a continuation of existing conditions. Thus, this alternative could result in an ongoing potentially significant impact to the environment (which would not otherwise occur under the proposed Project) because the extent of contamination in this area would remain unknown should this alternative be adopted. In comments made on the DEIR, the DOI indicated that the mouth of Bat Cave Wash has the



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potential for harboring contamination from SWMU 1, AOC 1, and AOC 4 and agreed with the need to characterize the mouth of Bat Cave Wash and reject the Reduction of Project Footprint Alternative. Further, DOI cited the National Contingency Plan (40 CFR 300.430), which requires that the fundamental objective of field investigations is to characterize the nature and extent of contamination such that informed decisions can be made as to the level of risk presented by the site and the appropriate type(s) of remedial response to address those risks (DOI 2014).

## **1.6.2 Reduction of Project Noise Alternative**

### **1.6.2.1 Summary of Reduction of Project Noise Alternative**

The noise analysis for the proposed Project assumed the concurrent operation of three pieces of equipment (hydrovac truck, roto sonic drill rig, backhoe) at each site during the field implementation phase of the Project (which is expected to occur over a 5-month duration). While this is a conservative analysis because there will likely be times when fewer pieces of equipment will be used, it is also possible that there will be some times where all three pieces of equipment are being used concurrently at a particular site. Under the Reduction of Project Noise Alternative, a Project restriction would be put in place such that only one piece of equipment would be allowed to be in operation at any given time. While the potential for upper noise levels at any given point in time may be reduced, the Reduction of Project Noise Alternative would delay the Project and complicate implementation. Putting this restriction in place would likely result in an extension of the Project schedule by at least one month, and could easily be extended to several months due to inefficiencies in staging the work and work flow processes, and would include an extension in the duration of associated noise and other environmental impacts. Implementation of this alternative would greatly complicate Project logistics, hinder efficiency, lengthen the Project duration, and result in a significant increase in Project costs for minimal benefit. Implications of limiting the allowed equipment to one piece at a time include the following:

- Increased complexity of Project logistics and phasing from coordinating pieces of field equipment across large project areas to ensure only one piece of equipment is operating at a time. This complexity is greatly amplified when coordination with other parties is critical (e.g., coordination with gas operations when work is done within the Station, coordination with monitors/agencies personnel that may observe the work, coordination with affected utility companies for subsurface utility clearance).
- Extending the period that Project-related noise will be generated by at least one and likely several months.
- Several months of additional vehicle and truck trips to the site for transporting field crews and equipment.
- Multiple pieces of field equipment would be required to be on standby over the entire duration of the field work, resulting in a significant cost increase.
- Several months of additional field per diem charges.

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- Several months of additional full-time supervision and compliance monitoring (e.g., biological and cultural).

The Reduction of Project Noise Alternative would result in impacts similar to those for the Project for aesthetics, air quality, biological resources, cultural resources, hazards and hazardous materials, and hydrology and water quality; however, the impacts would occur over a longer duration. Even though noise under this alternative would be less than the maximum potential noise from the Project, the duration of the noise exposure would be longer because of the longer time required to conduct the investigation. Therefore, although this approach would result in some reduction in noise levels, including reduction in the duration of substantial noise, it would not reduce the significant unavoidable noise impact to a less than significant level because noise levels from other investigative site locations would continue to result in a substantial increase over existing baseline average ambient noise levels.

#### **1.6.2.2 Conclusion**

As previously noted, the primary and fundamental objective of the Soil Investigation Project is to gather sufficient information to be able to reliably characterize the nature and extent of soil and sediment contamination within the Project Site. Under the Project, soil and sediment will be analyzed for COPCs previously identified in the Project Site (inside and outside the Station fence line) that resulted from historical Station practices, thereby enabling completion of the Final RFI/RI Report Volume 3 (Soil) and risk assessment as soon as practicable and consistent with applicable state law. The Reduction of Project Noise Alternative would conflict with this primary Project objective. Because of the longer duration of the investigation under this alternative, the requirement of the 1996 Corrective Action Consent Agreement that the Final RFI/RI Report Volume 3 (Soil) and risk assessment be completed as soon as practicable would not be met.

The Reduction of Project Noise Alternative would result in slightly worse impacts on aesthetics, air quality, biological resources, cultural resources, hazards and hazardous materials, and hydrology and water quality, since impacts would occur over a longer duration. While noise under this alternative would be less than the maximum potential noise from the proposed Project, the duration of the noise exposure would be longer as a result of the longer time required to conduct the investigation, so the significant unavoidable noise impact would not be reduced to a less than significant level.

DTSC rejects the Reduction of Project Noise Alternative because it would conflict with the Project's primary objective and would be more environmentally impacting. Because of the longer duration of the investigation under this alternative, the requirement of the 1996 Corrective Action Consent Agreement that the Final RFI/RI Report Volume 3 (Soil) and risk assessment be completed as soon as practicable would not be met. As described in the EIR, this alternative would also result in slightly worse impacts on aesthetics, air quality, biological resources, cultural resources, hazards and hazardous materials, and hydrology and water quality because of the longer duration; would not reduce significant unavoidable noise impacts to below significance; and would require that the investigation take place over a longer duration when compared to the proposed Project. The Alternative is therefore less desirable and would not meet the requirements

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for selection under CEQA. For this reason, DTSC rejects the Reduction of Project Noise Alternative as impracticable and undesirable from a policy standpoint and, therefore, infeasible within the meaning of CEQA because of environmental, legal and policy reasons.

### **1.6.3 Alternatives Considered but Not Analyzed in Detail**

Section 15126.6(c) of the CEQA Guidelines provides that an EIR “should also identify any alternatives that were considered by the lead agency but rejected as infeasible during the scoping process and briefly explain the reasons underlying the lead agency’s determination.” This section provides a discussion of two alternatives initially considered for evaluation and explains the reasons for rejecting these alternatives from further consideration.

#### **1.6.3.1 Tribal Land Use Alternative**

The FMIT presented a proposed Tribal Land Use Alternative for evaluation in the DEIR. The Tribal Land Use Alternative would limit future land uses within the Project Site to Tribal-use activities and apply Tribal cleanup standards to the site. This alternative would limit allowed Tribal-use activities to include three types of uses: Tribal Group Activities, Tribal Educational Activities, and Tribal member Individual Visits. For Tribal Group Activities, several times during the year Tribal members would potentially meet at the site for group prayer and reflection. Tribal Educational Activities would include students and young people, school or other youth classes, or adults coming to the area to learn about its importance and spiritual significance. Tribal Member Individual Visits would allow quiet time and reflection when Tribal members would pay homage to the area and honor their ancestors. The FMIT proposed the Tribal Land Use Alternative as an alternative that would reduce the amount of sampling and the associated ground-disturbing activities associated with the soil investigation, including drilling or excavation of soil borings, because the Tribal Land Use Alternative would provide higher screening levels to trigger the need for remediation activities for certain chemicals.

This alternative was rejected for the following reasons:

**Project Objectives.** The primary and fundamental objective of the Soil Investigation Project is to gather sufficient soil samples to be able to reliably characterize the nature and extent of soil and sediment contamination within the Project Site, and to inform the Soil CMS/FS and final remedy. Soil and sediments will be analyzed for COPCs previously identified in the Project Site (inside and outside the Station fence line) that resulted from historical Station practices, thereby enabling completion of the Final RFI/RI Report Volume 3 (Soil) and risk assessment as soon as practicable and consistent with applicable state and federal law.

If DTSC were to pursue a reduced intensity soil investigation alternative that was consistent with the Tribal Land Use Alternative, it would not provide the information necessary to fully evaluate the Soil CMS/FS and potential final remedial activities that may be required to meet residential/unrestricted land use standards, should those standards be imposed for remedy purposes, which could hypothetically occur in the future at the Project Site. Having incomplete data, as could occur under the proposed Tribal Land Use Alternative, would affect the accuracy and

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effectiveness of future remediation planning efforts, including but not limited to reducing the accuracy of the soil risk assessment, jeopardizing the effectiveness of remedial design and alternatives (should they be found warranted), and appropriately reviewing the alternatives. This would also result in PG&E's failure to fully characterize the nature and extent of soil and sediment contamination within the Project Site. Furthermore, DTSC would not be able to determine if the soil contamination at the Project Site poses a threat to groundwater or whether off-site migration of contamination is occurring. For these reasons, the Tribal Land Use Alternative would not meet the objectives of the Project.

**Feasibility.** To achieve the Project objectives, DTSC is gathering information that will lead to the investigation of cleanup options for the Project Site should the soil sampling results indicate a need for remedial actions. Characterization of the Site to levels of residential/unrestricted land use as the point of departure for evaluation of risk and potential alternatives at the Site as described in DTSC Management Memo #EO-02-002MM (DTSC 2002). The process for the characterization is based on state and federal laws which require that the investigation and cleanup of hazardous substance sites protect human health and the environment, that this protection be maintained over time, and that selected remedies minimize untreated waste and residual risks (DTSC 2002). As such, DTSC's evaluation of cleanup options includes unrestricted use as part of the analysis of options for all remediation projects (DTSC 2002).

With respect to the FMIT's request to use the Tribal Land Use Alternative screening levels for the soil investigation rather than the varying use of residential, background, and human-or-ecological based levels, using this approach would go against DTSC's policy of evaluating remedies that protect human health and the environment (DTSC 2002), which includes ecological receptors and groundwater resources. Site-specific background and human health- and ecological-comparison values are used to assist in characterizing the nature and extent of contamination for the purpose of evaluating the risk to human and ecological receptors, as well as the risk to the underlying beneficial use of groundwater. Using only Tribal Land Use screening levels would be impracticable, undesirable and too limited for this Project since it would not take into account potential risk to ecological receptors or the risk to groundwater.

For these reasons, this alternative was determined to not be feasible as it would not be consistent with DTSC's policy to consider residential/unrestricted land use for the Project Site during the investigation stage of the remedial process, which is based on state and federal laws.

### **1.6.3.2 Alternative Incorporating Cleanup Actions**

In response to the NOP for the Project DEIR, a commenter presented an alternative that would go beyond the proposed investigative and data collection activities, and would also incorporate cleanup actions into the Project. Under this alternative, toxins and chemicals of concern would be removed when found, thereby expediting the cleanup process, reducing the overall cleanup schedule and minimizing the cumulative impacts of what are currently contemplated as two separate projects.

This alternative was rejected for the following reasons:

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**Project Objectives.** Although this alternative would meet some of the Project objectives of characterizing the nature and extent of soil and sediment contamination within the Project Site, it would not include a full screening and evaluation of remedial action technologies for the Project Site. Furthermore, a presumptive remedial technology may or may not be appropriate for all areas of contamination depending on the location, type, and intensity of contamination yet to be discovered. The objective of this project is to analyze soil and sediment for COPCs previously identified at the Project Site (inside and outside the Station fence line) that resulted from historical Station practices, thereby enabling completion of the Final RFI/RI Report Volume 3 (Soil) and risk assessment as soon as practicable and consistent with applicable state law. The proposed alternative would expand the Soil Investigation Project to include cleanup actions, but would bypass a necessary step to evaluate the appropriate cleanup options. Therefore, under the proposed alternative, the objectives of the Project would not be met.

**Feasibility.** To appropriately identify a final soil remedy, the extent and nature of what was released at the site and the extent of the problem from the release(s) need to be determined first. The Project includes the actions necessary to identify the extent and nature of soil and sediment contamination at the site. Although it may seem more expedient if the contamination is removed as it is identified during the investigation, DTSC has committed to minimizing the intrusion and removing as little of the soil as possible while protecting the people and the environment that may come into contact with the material. Using the currently proposed process where cleanup occurs only after full investigation and data analysis, DTSC may find that there are technologies that can be used to remove the contaminants without actually removing the soil from the site (e.g., through on-site treatment). However, DTSC can only make that determination after it has gathered enough information to fully understand the nature and extent of the contamination at the Project Site. If remediation were to take place concurrently with the investigation, or in lieu of the investigation, the overall environmental effects would likely be more severe as the most conservative cleanup actions would need to be selected in order to ensure public health and safety.

This suggested alternative would also likely require significantly more disruption to the soil and lands of Tribal significance that comprise the Project Site. Significant soil removal and export would be necessary to provide the most conservative (residential/unrestricted land use) cleanup standards rather than gather a sufficient level of information for the state and federal lead agencies to select the most appropriate final remedy based on the information gathered.

For these reasons, this alternative was determined to not be feasible as it would expand the primary goal of the Project (to successfully gather enough information to fully inform the future Soil CMS/FS and final remedy) and it would also likely require more disruption of the soil and lands of Tribal significance.

#### **1.6.4 Rejection of No Project Alternative**

Pursuant to Section 15126.6(e)(2) of the CEQA Guidelines, the No Project Alternative shall:

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...discuss the existing conditions at the time the notice of preparation is published, or if no notice of preparation is published, at the time the environmental analysis is commenced, as well as what would be reasonably expected to occur in the foreseeable future if the project were not approved, based on current plans and consistent with available infrastructure and community services.

The existing condition at the time the NOP for the Project was published included ongoing operation of the Station and related PG&E facilities at the Project Site. Reasonably foreseeable future activities are associated with the ongoing operation of the Station as well as groundwater remediation at the Project Site, which will be implemented independently of the Project. An FEIR for the Topock Compressor Station Groundwater Remediation Project was approved on January 31, 2011, and includes implementation of the preferred Alternative E—In Situ Treatment with Freshwater Flushing. DTSC also approved the *Topock Compressor Station Groundwater Remediation Project Environmental Impact Report Addendum No. 1 for Alternative Freshwater Source Evaluation Activities* (DTSC 2013), which, when implemented, will involve additional freshwater sources for consideration in the groundwater remediation project. The preferred groundwater remedy will involve installation of approximately 110 injection and extraction wells, reductant holding tanks and storage facilities, approximately 60 monitoring wells, pipelines and other utilities, and roadways for in situ treatment of contaminated groundwater. At the time of the NOP, PG&E also installed and tested wells at the East Ravine and Station locations. These activities were conducted to support the groundwater remedy design. In addition, PG&E has been operating and maintaining the Interim Measure (IM) 3 extraction and treatment system at the Project Site since July 2005.

For the No Project Alternative, soil investigation activities identified under the proposed Project would not be implemented. Soil data needed to support the decisions identified in the DQOs for investigation areas located outside the Station fence line and investigation areas located within the Station fence line would not be collected. Under the No Project Alternative, the risk assessment and future Soil CMS/FS would not be conducted; therefore, no remedy for soil investigation would be identified. Potentially contaminated soil could continue to exist at undocumented and unexplored capacities and may continue to pose a potential risk to human health and the environment if the No Project Alternative were implemented.

#### **1.6.4.1 Ability to Meet Most of the Project Objectives**

The No Project Alternative would not meet any of the Project objectives. Under the No Project Alternative, soil contamination and soil contamination migration would not be assessed and would continue into the future. The presence of potentially contaminated soil would continue to exist unmitigated. Pursuant to the RCRA, PG&E must investigate all possible hazardous material releases from past waste management activities and mitigate the contamination if necessary. The No Project Alternative would impede compliance with the law. Therefore, the No Project Alternative would not meet the primary and fundamental project objective.

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#### 1.6.4.2 *Comparison of Environmental Impacts*

This section compares the environmental impacts of the No Project Alternative to those of the Project.

- **Aesthetics.** The No Project Alternative would not impact scenic vistas or the visual character of the Project Site. Under the No Project Alternative, the Project Site would not be affected by soil investigation activities that may alter the religious and cultural experience of Native American Tribes. In addition, increases in light and glare would not occur under the No Project Alternative. Thus, the No Project Alternative would result in less aesthetic effects when compared to the proposed Project. However, because the visual effects of the proposed Project would be minimal and temporal, they were determined to be less than significant.
- **Air Quality.** The No Project Alternative would not increase air quality impacts from existing conditions. The proposed Project could cause potential air quality impacts, but due to the short term nature of the proposed Project, mitigation measures would not be required to reduce impacts to a less than significant level. Thus, although the No Project Alternative would result in fewer air quality impacts when compared to the proposed Project, these differences would not be substantial. If the No Project Alternative were implemented, however, potentially harmful soil may become airborne and increase the risk to human health and the environment as a result of weather conditions or other human related disturbances which could (legally or illegally) occur in the Project Site.
- **Biological Resources.** Under the No Project Alternative, no soil investigation activities would be conducted, including establishment of physical access to sampling locations, establishment of staging areas, and drilling or excavating soil borings. Therefore, the No Project Alternative would result in fewer biological resource impacts than the proposed Project. If the No Project Alternative were implemented, however, potentially harmful soil at the Project Site would continue to pose a risk to biological resources, including plant and animal species that depend on uncontaminated desert habitat for survival.
- **Cultural Resources.** The No Project Alternative would not alter existing conditions at the Site; contaminated soil would remain in place and would not be characterized, evaluated, or remediated. The proposed Project would result in significant and unavoidable adverse change to historical resources, including the Topock TCP. Because the No Project Alternative would cause no adverse change to historical resources, human remains, or paleontological resources, it would not cause or contribute to any cumulative effect on cultural resources. Therefore, the No Project Alternative would avoid the substantial adverse effects that would occur under the Project.
- **Hazards and Hazardous Materials.** The No Project Alternative would not involve the assessment of soil contamination and soil migration on the Project Site. There would be no disruption of soil and no related potential for disruption or exposure of hazardous materials. If the No Project Alternative were implemented, however, potentially harmful soil that

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remains on the Project Site would remain unmitigated, which could pose a threat to the protection of health, safety, and the environment as the contaminant may spread as a result of weather conditions or other human-related disturbances that could (legally or illegally) occur in the Project Site.

- **Hydrology and Water Quality.** The No Project Alternative would not involve the assessment of soil contamination and soil migration and related ground-disturbing activities on the Project Site. There would be no disruption of soil or water use and therefore no resulting impacts to hydrology or water quality. If the No Project Alternative were implemented, however, potentially harmful contaminants in soil may be transported to groundwater or surface water and increase the risk to water quality in particular as a result of weather conditions or other human-related disturbances that could (legally or illegally) occur in the Project Site.
- **Noise.** The No Project Alternative would not alter the existing condition or involve activities that would generate noise. The proposed Project would result in significant and unavoidable impacts to ambient noise levels after the implementation of mitigation. Therefore, the No Project Alternative would avoid the substantial adverse effects that would occur under the Project.

### 1.6.5 Environmentally Superior Alternative

CEQA requires that an EIR identify the environmentally superior alternative of a project other than the No Project Alternative (CEQA Guidelines Section 15126.6(e)(2)). As discussed in Section 1.6.1, the Reduction of Project Footprint Alternative would result in minor reductions in environmental effects when compared to the Project and the Reduction of Project Noise Alternative, and is therefore considered the Environmentally Superior Alternative. The Reduction of Project Footprint Alternative would avoid impacts to biological resources within the mouth of Bat Cave Wash, thereby reducing the overall biological impacts of the Project. While the Reduction of Project Noise Alternative would reduce noise-related impacts to biological resources within the mouth of Bat Cave Wash, it would not avoid them as with the Reduction of Project Footprint Alternative. In addition, under the Reduction of Project Footprint Alternative, potential impacts to cultural resources would be slightly reduced relative to the Project and Reduction of Project Noise Alternative because the Project footprint would be reduced. However, because there remains a potential to impact historical or unique archaeological resources under the Reduction of Project Footprint Alternative, this incremental difference would not avoid the significant and unavoidable impacts to cultural resources identified for the Project.

The Reduction of Project Footprint Alternative, however, would not achieve the fundamental Project objectives and is therefore deemed undesirable and infeasible by DTSC. The primary and fundamental objective of the Soil Investigation Project is to gather sufficient information to be able to reliably characterize the nature and extent of soil and sediment contamination within the Project Site. Characterization of the nature and extent of soil and sediment contamination at the mouth of Bat Cave Wash is fundamental to understanding whether contaminant concentrations in that area pose a threat to groundwater and have the potential to migrate off-site. Without that



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characterization, the Reduction of Project Footprint Alternative would not meet the objectives of the Project. Furthermore, failure to consistently evaluate the nature and extent of contamination at the mouth of Bat Cave Wash would not adequately characterize the existing risks to human health or the environment, which may lead to significant degradation or irreversible adverse impacts.

### **1.6.6 Conclusions Regarding Project Alternatives**

Based on the foregoing analysis and pursuant to CEQA Guidelines Section 15126.6, DTSC has considered a range of reasonable alternatives to the Project which could feasibly attain most of the basic objectives of the Project but would avoid or substantially lessen certain significant effects of the project. DTSC has evaluated the comparative merits of the various alternatives and identified and analyzed potentially environmentally superior alternatives. Based on this analysis and substantial evidence in the Record, DTSC finds and determines that none of the alternatives are feasible within the meaning of CEQA and therefore rejects each alternative in favor of the proposed Project.

## **1.7 Statement of Overriding Considerations**

CEQA requires all public agencies to balance the benefits of a proposed project against its unavoidable environmental effects in determining whether to approve the project or not. DTSC proposes to approve the Project despite the significant and unavoidable adverse impacts identified in the FEIR for the Project. In making this determination, DTSC is guided by CEQA Guidelines Section 15093 which provides as follows:

- (a) CEQA requires the decision-making agency to balance, as applicable, the economic, legal, social, technological, or other benefits, including region-wide or statewide environmental benefits, of a proposed project against its unavoidable environmental risks when determining whether to approve the project. If the specific economic, legal, social, technological, or other benefits, including region-wide or statewide environmental benefits, of a proposed project outweigh the unavoidable adverse environmental effects, the adverse environmental effects may be considered “acceptable.”
- (b) When the lead agency approves a project which will result in the occurrence of significant effects which are identified in the final EIR but are not avoided or substantially lessened, the agency shall state in writing the specific reasons to support its action based on the Final EIR and/or other information in the record. The statement of overriding considerations shall be supported by substantial evidence in the record.
- (c) If an agency makes a statement of overriding considerations, the statement should be included in the record of the project approval and should be mentioned in the notice of determination. This statement does not substitute for, and shall be in addition to, findings required pursuant to Section 15091.

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As described in the FEIR, the Project involves soil investigation activities at the Station, including implementation of the Soil Work Plan (CH2M HILL 2013; Appendix A to the FEIR Volume 3) and portions of the CM/FS Work Plan (CH2M HILL 2008).

With the implementation of the mitigation measures and conditions of approval adopted by DTSC, most of the significant environmental impacts of the Project can be mitigated to less than significant levels. As indicated in the FEIR, however, the Project is expected to result in significant and unavoidable impacts on cultural resources (direct and cumulative) and noise (direct).

### **1.7.1 Significant and Unavoidable Impacts of the Project**

Although most significant adverse impacts of the Project have been avoided or substantially lessened to less than significant levels through the imposition of mitigation measures, as described in the FEIR and Findings, there remain some Project impacts that cannot feasibly be mitigated to a less than significant level, especially considering the sacred nature of the area to Interested Tribes. The FEIR identified the following significant and unavoidable impacts of the Project:

- **IMPACT CR-1:** Potential Impacts to the Topock Traditional Cultural Property. Implementation of the proposed Project could cause a substantial adverse change in the significance of the historical resource identified as the Topock TCP as a result of the physical destruction and alteration to the characteristics of the property that convey its historical significance and qualify it for inclusion in the California Register of Historical Resources as defined in CEQA Guidelines Section 15064.5. The substantial adverse change to the TCP and its contributing elements would result from ground-disturbing activity that would directly and adversely affect the soil, landforms, and unknown prehistoric archaeological resources; pruning or alteration of the natural growth of native and traditional plant species; plant and biota sampling; and the presence of equipment, workers, and vehicles, which would introduce activities that are inconsistent with the natural setting associated with the Topock TCP. These activities would also materially affect the cultural values ascribed to the TCP by Tribes.
- **IMPACT CR-2:** Potential Impacts to Known and Unknown Historical Resources and Unknown Unique Archaeological Resources. Implementation of the proposed Project could, however, cause a substantial adverse change in the significance of unknown historical resources (other than the TCP) and unknown unique archaeological resources pursuant to CEQA Guidelines Section 15064.5 resulting from ground-disturbing activity.
- **IMPACT CR-4:** Potential Impacts to Human Remains. Implementation of the proposed Project could, through the process of ground-disturbing activities, disturb human remains, including those interred outside of formal cemeteries.
- **IMPACT CUM-1:** Cumulatively Considerable Impacts to Cultural Resources. Implementation of the proposed Project, in combination with other projects in the

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geographic scope, could cause a substantial adverse change in the significance of the historical resource identified as the Topock TCP; cause a substantial adverse change in the significance of unknown historical resources; and disturb human remains, including those interred outside of formal cemeteries.

- **IMPACT NOI-1:** Potential to expose persons and noise-sensitive land uses to a substantial temporary or periodic increase in ambient noise levels and/or exceed standards established by San Bernardino County. Ambient noise levels at existing noise-sensitive land uses may experience increased noise levels due to soil investigation activities for short-term periods. The proposed Project would exceed applicable County standards for a place of worship and could result in a temporary substantial increase in ambient noise levels.

DTSC's Findings with respect to the Topock Compressor Station Soil Investigation Project's significant effects and mitigation measures are set forth in the table attached to these Findings as **Table 1**.

### **1.7.2 Benefits of the Project**

DTSC has determined that the economic, legal, social, technological, and other benefits of implementing the Project outweigh and override the significant and unavoidable adverse effects of the Project. DTSC has determined that the benefits of the Project, when balanced against all adverse effects, cause those effects remaining after mitigation to be acceptable because of the following considerations:

- The Project will enable completion of the Final RFI/RI Report Volume 3 (Soil) and risk assessment as required by the 1996 Corrective Action Consent Agreement (CACA) as soon as practicable and consistent with applicable state laws and regulations, including finalizing the evaluation of soil properties and contaminant distribution for the Site to support preparation of the future Soil CMS/FS and gathering a sufficient level of information to determine if remediation is warranted and, if so, to identify a range of remedial alternatives.
- The Project will assess whether existing soil contaminant concentrations pose a threat to groundwater.
- The Project will assess whether existing contamination have the potential to migrate off-site and, if so, gather sufficient information to assess measures that may be required to prevent and minimize such migration to ensure protection of health, safety, and the environment.

These considerations are further explained below.

#### ***Enable Completion of the Final RFI/RI Report Volume 3 (Soil) and Risk Assessment as Required by the 1996 CACA***

As described in the EIR and in Section 1.1.1 of the Findings, the Project Site is undergoing investigation and remediation under both RCRA and CERCLA. In 1996, PG&E and DTSC

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entered into a CACA pursuant to DTSC's RCRA Corrective Action Program to more fully investigate the nature and extent of contamination at the Station and in the surrounding area, including soil contamination. The proposed Project is necessary to provide sufficient data for the completion of the RFI/RI process, as required by the CACA, consistent with applicable state law and would support assessment of risk to human and ecological receptors and evaluation of possible remedy action if determined necessary.

Soil within the Station fence line and in the vicinity of the Station has been affected by historical releases of COPCs, including Cr(VI), metals, acids, petroleum hydrocarbons, PAHs, PCBs, VOCs, SVOCs, dioxins and furans, pesticides, and asbestos (CH2M HILL 2013) that may pose an unacceptable risk to human health, sensitive ecological receptors, and groundwater resources. Various other COPCs have also been detected at concentrations above soil screening levels. The primary and fundamental objective of the soil investigation activities is to gather sufficient soil samples to be able to reliably characterize the nature and extent of soil and sediment contamination within the Project Site and determine the risk posed by the contamination. The Project includes soil sampling and analysis as described in the Soil Work Plan and potential bench scale tests, pilot studies, geotechnical evaluations, and plant or other biota sampling. Project activities would support a future CMS/FS, including gathering a sufficient level of information to identify a range of remedial alternatives that could be developed to cleanup identified contamination that poses excessive risk. Therefore, DTSC has made the policy determination to move forward with the Project as it complies with the requirements of the CACA and enables the completion of the RFI/RI process.

### ***Assess Whether Soil Contaminant Concentrations Pose a Threat to Groundwater***

As discussed in the Soil Work Plan (CH2M HILL 2013), soil constituents can be leached to groundwater through periodic flushing events, with rain, or by facility-generated fluids. Therefore, one of the objectives of the proposed Project is to assess whether soil contaminants on the Project Site pose a threat to groundwater. As part of the Project, soil screening levels would be calculated for any COPC exceeding background concentrations, and modeling would be conducted to further evaluate the potential threat to groundwater.

DTSC must protect the groundwater basin from contamination because the basin is designated by the Regional Water Quality Control Board as a groundwater body suitable for beneficial use for drinking water supply. Completing the analysis included in the Soil Work Plan would allow determination of whether any soil corrective measures are needed to protect the beneficial use of the groundwater basin. This benefit outweighs the significant and unavoidable impacts of the Project. Therefore, DTSC has made the policy determination to move forward with the Project to ensure protection and long-term remediation of groundwater.

### ***Assess Whether Soil Contamination Have the Potential to Migrate Off-Site***

As discussed in the Soil Work Plan (CH2M HILL 2013), investigation data collected as part of the Project would be used to help evaluate whether human and ecological receptors outside the Station fence line could be exposed to surface soil impacted by chemicals originating within the

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fence line through the off-site migration pathway. The Project is necessary to gather sufficient information to assess measures that may be required to prevent and minimize such migration to ensure protection of health, safety, and the environment. This benefit outweighs the significant and unavoidable impacts of the Project. Therefore, DTSC has made the policy determination to move forward with the Project.

### 1.7.3 Conclusion

Each of the above considerations is sufficient to approve the Project. For each of the reasons stated above, and all of them, the Project should be implemented notwithstanding the significant unavoidable adverse impacts identified in the EIR.

## 1.8 Mitigation Monitoring Reporting Program

CEQA Guidelines Section 21081.6 requires that when a public agency is making the Findings required by Section 21081, the public agency shall adopt a reporting or monitoring program for the changes made to the project or conditions of project approval to mitigate or avoid significant effects on the environment. Because mitigation measures have been adopted to mitigate or avoid significant environmental effects of the project, an MMRP has been prepared for the Project and is adopted along with these Findings. The MMRP is attached to the Statement of Decision and Resolution of Approval for the Topock Compressor Station Soil Investigation Project as **Exhibit 2**. DTSC will use the MMRP to track compliance with Project mitigation measures. The MMRP will remain available for public review during the compliance period.

## 1.9 References

- California Department of Substances Control (DTSC). 2011 (January). *Final Environmental Impact Report for the Topock Compressor Station Groundwater Remediation Project*, Volumes 1 and 2, and additional supporting decision documents (Findings of Fact and MMRP).
- California Department of Substances Control (DTSC). 2013 (August). *Topock Compressor Station Groundwater Remediation Project Environmental Impact Report Addendum No. 1 for Alternative Freshwater Source Evaluation Activities*.
- CH2M HILL. 2008 (March). *Corrective Measures/Feasibility Study Work Plan, Topock Compressor Station, Needles, California*.
- CH2M HILL. 2009 (December). *The Final Groundwater Corrective Measures Study/Feasibility Study Report for Solid Waste Management Units (SWMU) 1/Area of Concern (AOC) 1 and AOC 10 (Final CMS/FS). PG&E Topock Compressor Station, Needles, California*. Oakland, CA. Published by Pacific Gas and Electric Company, San Luis Obispo, CA.
- CH2M HILL. 2013 (January). *Soil RCRA Facility Investigation/Remedial Investigation Work Plan, PG&E Topock Compressor Station, Needles, California, revised*.

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McDowell, Nora, Dawn Hubbs, and Jill McCormick. 2013. *Topock Compressor Station Tribal Cultural Values Assessment*, submitted to the BLM, DTSC, and PG&E, November 21, 2013.

U.S. Census Bureau. 2010. Census 2010 data sets. Available:<http://factfinder2.census.gov/faces/nav/jsf/pages/index.xhtml>. Accessed December 15, 2013.

U.S. Department of the Interior (DOI). 2005 (July). *Final Executed Consent Agreement: Pacific Gas and Electric Company, Topock Compressor Station, Needles, California*.

U.S. Department of the Interior (DOI). 2013. *Remedial Action/Remedial Design Consent Decree between the United States of America and Pacific Gas & Electric Company* (Consent Decree), Case 5:13-cv-00074-VAP-OP, Document 5-1. Filed January 15, 2013.

U.S. Department of the Interior (DOI). 2014. *Comments submitted on the Topock Compressor Station Soil Investigation Project DEIR*. August 8, 2014.

## Table 1

Table of Significant Impacts,  
Mitigation Measures, and  
CEQA Findings of Fact

**TABLE 1**  
**TABLE OF SIGNIFICANT IMPACTS, MITIGATION MEASURES, AND CEQA FINDINGS OF FACT**

Significant Environmental Impact	Mitigation Measures	Level of Significance after Mitigation	Findings of Fact
<b>Biological Resources</b>			
<b>IMPACT BR-1: Substantial Adverse Effects on Waters, Riparian, or Sensitive Habitats Protected by Federal or State Regulations.</b> Implementation of the proposed Project could result in disturbance and/or removal of riparian vegetation, wetlands and other waters of the United States under U.S. Army Corps of Engineers and California Department of Fish and Wildlife jurisdiction along the Colorado River; specifically within Bat Cave Wash and East Ravine.	<p><b>Mitigation Measure BR-1: No-net-loss of Wetland, Riparian or other Sensitive Habitat Function or Value</b></p> <p>The Project shall be implemented to avoid effects to the habitat values and functions of identified jurisdictional areas (i.e., floodplain and riparian areas, wetlands, and waters of the United States and habitats designated by CDFW as sensitive, including ephemeral washes and western honey mesquite bosque). Before undertaking ground-disturbing activities within East Ravine and Bat Cave Wash, a qualified biologist shall coordinate with PG&amp;E to ensure that the footprints of investigation activities, including drill pads, staging areas, and access routes, are designed to avoid disturbance to sensitive habitats. Where complete avoidance to sensitive habitat is not feasible DTSC shall be notified and Project activities shall be implemented to ensure no-net-loss of habitat value or function under the direction of a qualified biologist. The following avoidance measures shall be implemented when working in Bat Cave Wash and East Ravine:</p> <ol style="list-style-type: none"> <li>No plants or vegetation shall be completely removed – only pruning, trimming, clearing, or similar approaches which allow the natural regrowth of the plant will be allowed;</li> <li>Vegetation pruning, trimming, or clearing shall only occur to access investigation sites and clear around the sample areas where absolutely necessary;</li> <li>The only vegetation to be cut off at the base (cleared rather than pruned or trimmed) will be salt cedar at the mouth of Bat Cave Wash. The roots of the salt cedar at the mouth of Bat Cave Wash will be left in place where possible to allow for natural, rapid regrowth of vegetation;</li> <li>No more than 20 percent of the crown on all native trees, such as palo verde, shall be trimmed, and no main branches shall be trimmed. This is consistent with what is recommended by the International Society of Arboriculture (ISA 2011);</li> <li>Complete removal of vegetation in any work area shall be prohibited; and</li> </ol>	Less than Significant	<p><b>Finding:</b> DTSC finds that changes or alterations have been required in, or incorporated into, the project which avoid or substantially lessen this significant environmental effect as identified in the FEIR. (CEQA Guidelines, § 15091, subd. (a)(1).)</p> <p>DTSC also find that such changes or alterations are within the responsibility and jurisdiction of other public agencies and not the agency (DTSC) making the finding. Such changes have been adopted by such other agencies or can and should be adopted by such other agencies. (CEQA Guidelines, § 15091, subd.(a)(2).)</p> <p><b>Facts in Support of Finding:</b> Avoidance of impacts to habitat function and value of wetlands, other waters of the U.S. and riparian habitat would occur through the reduction of vegetation removal and restoration as described in Mitigation Measure BR-1. Using these measures, revegetation is expected to occur naturally within one to two growing seasons ensuring a no-net-loss of habitat value or function within this timeframe. This would reduce impacts on sensitive habitats to a less than significant level. (FEIR Volume 3, pp. 4.3-66-4.3-67.)</p>



**TABLE 1**  
**TABLE OF SIGNIFICANT IMPACTS, MITIGATION MEASURES, AND CEQA FINDINGS OF FACT**

Significant Environmental Impact	Mitigation Measures	Level of Significance after Mitigation	Findings of Fact
	<p>f. Project equipment and materials from work areas shall be completely removed and, if the area is not paved, it shall be raked/brushed to remove tire tracks.</p> <p>“No net loss” shall be achieved through any combination of the following, in descending order of desirability: (1) avoidance; (2) where avoidance is not possible, minimization of impacts on the resource (a – f above); or (3) 1:1 like kind habitat compensation, including use of a mitigation banking program that provides the opportunity to mitigate impacts to rare, threatened, and endangered species and /or the habitat which supports these species in wetland and riparian areas. A biological monitor shall be present for all vegetation trimming, pruning, and clearing to ensure the above measures are implemented and that vegetation is protected to the extent feasible</p>		
<p><b>IMPACT BR-4: Direct Disturbance of and Loss of Habitat for Special-Status Bird Species.</b> While the proposed Project could result in the temporary loss of foraging habitat for these species, the loss of foraging habitat would not substantially affect any special-status birds due to the abundance of foraging habitat in the vicinity of the Project Site. Implementation of the proposed Project could affect the active nests of special-status birds. In addition, visual or noise disturbance of active nests could result in nest abandonment and loss of sensitive bird species.</p>	<p><b>Mitigation Measure BR-4: Disturbance of Special-Status Birds.</b></p> <p>The following measures shall be implemented to avoid impacts to active nests and nesting birds and to ensure compliance with the Migratory Bird Treaty Act and California Fish and Game Code:</p> <p>a. Vegetation trimming, pruning, or clearing and other activities shall be timed to avoid the nesting season for special-status bird species that may be present (March 15 through September 30) except as provided for in item b, below.</p> <p>b. If vegetation removal or other Project activities are necessary in vegetated areas between March 15 and September 30, DTSC shall be notified and focused surveys for active nests of special-status birds (including Arizona Bell’s vireo, California black rail, Yuma clapper rails and other species identified in Table 4.3-3) shall be conducted no more than 72 hours before such activities begin. A qualified biologist shall conduct pre-investigation surveys to identify active nests that could be affected. The appropriate area to be surveyed and the timing of the survey may vary depending on the activity and species that could be affected and shall be determined by the qualified biologist. For the Yuma clapper rail, the pre-investigation surveys shall specifically identify habitat within 300 feet of investigation areas, in accordance with measures set forth in</p>	Less than Significant	<p><b>Finding:</b> DTSC finds that changes or alterations have been required in, or incorporated into, the project which avoid or substantially lessen this significant environmental effect as identified in the FEIR.</p> <p><b>Facts in Support of Finding:</b> Implementation of the Project could affect the active nests of special-status birds and visual or noise disturbance of active nests could result in nest abandonment and loss of sensitive bird species. Special-status bird species and habitat will be protected by implementation of Mitigation Measure BR-4 because it will limit intrusion on active nesting sites for these birds. Conducting pre-investigation surveys for special-status birds and nesting birds and developing and following avoidance and minimization measures (including establishing buffers for active nests) as described in Mitigation Measure BR-4 will reduce the impact on nesting special-status birds to a less than significant level because impacts to active nests and nesting birds will be avoided. (FEIR Volume 3, pp. 4.3-68 - 4.3-70).</p>

**TABLE 1**  
**TABLE OF SIGNIFICANT IMPACTS, MITIGATION MEASURES, AND CEQA FINDINGS OF FACT**

Significant Environmental Impact	Mitigation Measures	Level of Significance after Mitigation	Findings of Fact
	<p>the Bird Avoidance and Minimization Plan (BIAMP) which was finalized on April 30, 2014 (CH2M HILL 2014).</p> <p>c. The qualified biologist shall implement all of the avoidance and minimization measures that are outlined in the BIAMP (CH2M HILL 2014).</p> <p>d. The qualified biologist shall consult the BIAMP (CH2M HILL 2014) for required nesting bird avoidance buffers and requirements for the on-site biological monitor. Buffers vary depending on the species of bird, so the BIAMP (CH2M HILL 2014) should be consulted once a nest is identified.</p>		
<p><b>IMPACT BR-5: Direct Disturbance of and Loss of Habitat for Desert Tortoise.</b></p> <p>Implementation of the proposed Project could affect desert tortoises, either directly or through habitat modifications.</p>	<p><b>Mitigation Measure BR-5: Disturbance of Desert Tortoise and Loss of Habitat.</b></p> <p>Consistent with the PBA and the USFWS letter concurring with the PBA, the following measures shall be implemented:</p> <p>a. Before any ground-disturbing Project activities begin, a qualified desert tortoise biologist (i.e., an experienced tortoise expert whom USFWS would be confident in the evaluation and survey for the presence of the desert tortoise under the PBA) shall identify potential desert tortoise habitat in areas that could be affected by the Project activities. The qualified desert tortoise biologist shall conduct a pre-investigation desert tortoise clearance survey prior to the start of investigative activities. The qualified desert tortoise biologist shall also conduct monitoring on a periodic basis (1–2 days for a 2-week period) or as a result of a change in investigation boundaries or limits.</p> <p>b. PG&amp;E shall designate a field contact representative who will be responsible for proper execution of the mitigation measures. The field contact representative shall be trained by the qualified desert tortoise biologist and have authority to halt activities that are in violation of the mitigation measures/or pose a danger to listed species. The field contact representative will have a copy of the mitigation measures when work is being conducted on the Project Site. The field contact representative may be a project manager, PG&amp;E representative, or qualified biologist.</p>	Less than Significant	<p><b>Finding:</b> DTSC finds that changes or alterations have been required in, or incorporated into, the project which avoid or substantially lessen this significant environmental effect as identified in the FEIR.</p> <p><b>Facts in Support of Finding:</b> No evidence of use by desert tortoises was documented at the project site during protocol-level surveys site and the quality of habitat near the project site is poor. There is, however, a slight potential for the desert tortoise to enter the Project Site. Conducting pre-investigation surveys for desert tortoises, conducting worker awareness training, and conducting biological monitoring as described in Mitigation Measure BR-5 will reduce the impact on the species to a less than significant level because impacts to desert tortoise will be avoided. Mitigation Measure BR-5 is consistent with the <i>Programmatic Biological Assessment for Pacific Gas and Electric Topock Compressor Station Remedial and Investigative Actions</i> (PBA) (CH2M HILL 2007a) and with a letter from the U.S. Fish and Wildlife Service concurring with the PBA. (FEIR Volume 3, pp. 4.3-70 - 4.3-72).</p>

**TABLE 1**  
**TABLE OF SIGNIFICANT IMPACTS, MITIGATION MEASURES, AND CEQA FINDINGS OF FACT**

Significant Environmental Impact	Mitigation Measures	Level of Significance after Mitigation	Findings of Fact
	<p>c. Prior to Project activities and immediately prior to the initiation of ground disturbance, a qualified desert tortoise biologist shall conduct worker awareness training for all PG&amp;E employees and the contractors involved with the proposed Project.</p> <p>d. The field contact representative will be on-site during all Project activities. The qualified desert tortoise biologist will examine work areas for desert tortoises and their sign (i.e., burrows, scat, tracks, remains, and pallets), ensuring 100 percent coverage of the area, and clear each area of activity prior to work initiation. Any desert tortoise burrows and pallets outside of, but near, the project footprint shall be flagged at that time so that they may be avoided during work activities. At conclusion of work activities, all flagging shall be removed. Should any live tortoises be found during the clearance survey, or if a tortoise moves into the work area, all work shall stop immediately and the animal shall be left to move out of the work area on its own accord. Tortoises shall not be handled. Encounters with live desert tortoises shall be reported to BLM Lake Havasu biologists. Information to be reported will include for each individual: the location (narrative, vegetation type, and maps) and date of observation; general conditions and health; any apparent injuries and state of healing; and diagnostic markings.</p> <p>All workers shall be required to check under their equipment or vehicle before it is moved. If a desert tortoise is encountered under vehicles or equipment, the vehicle shall not be moved until the animal has voluntarily moved to another location or to a safe distance from the parked vehicle.</p>		
<b>IMPACT BR-6: Disturbance of Ring-Tailed Cat and Loss of Habitat.</b> Implementation of the proposed Project could affect ring-tailed cat, either directly or through habitat modifications.	<p><b>Mitigation Measure BR-6: Disturbance of Ring-Tailed Cat and Loss of Habitat.</b></p> <p>The following measures shall be implemented:</p> <p>a. Pre-investigation surveys for ring-tailed cats will be conducted by a qualified biologist prior to the start of investigation activities. No activities that will result in disturbance to nests or ring-tailed cats will proceed prior to</p>	Less than Significant	<p><b>Finding:</b> DTSC finds that changes or alterations have been required in, or incorporated into, the project which avoid or substantially lessen this significant environmental effect as identified in the FEIR.</p> <p><b>Facts in Support of Finding:</b> Any potential disturbance and loss of habitat for ring-tailed cats would be relatively minor in terms of the potential acres disturbed.</p>

**TABLE 1**  
**TABLE OF SIGNIFICANT IMPACTS, MITIGATION MEASURES, AND CEQA FINDINGS OF FACT**

Significant Environmental Impact	Mitigation Measures	Level of Significance after Mitigation	Findings of Fact
	<p>completion of the surveys. If no active nests are found, no further action is needed. If a ring-tailed cat nest is present, additional measures will be implemented as outlined below. The CDFW and DTSC will also be notified of any active nests within the proposed disturbance zones.</p> <p>b. If an active ring-tailed cat nest is found, the Project shall be redesigned to avoid the loss of the site occupied by the nest if feasible. If the Project cannot be redesigned to avoid the nest, the CDFW and DTSC will be contacted. If approved by the CDFW and DTSC, demolition of the nest site will commence outside of the breeding season (February 1 to August 30) when the nest is vacated. If a non-breeding nest is found in a site scheduled to be removed, prior to disturbance, the CDFW and DTSC will be notified to review and approve the proposed procedures to ensure that no take occurs as a result of the action. Sites with inactive nests that need to be removed will first be disturbed at dusk, just prior to removal that same evening, to allow adult ring-tailed cats to escape during the darker hours.</p>		<p>However, since there is a potential for the ring-tailed cat to nest on the Project Site, the species could be directly impacted by the implementation of the Project. Impacts to the species could include injury or death through direct contact with Project equipment, through collapse or damage of an active or occupied nest, or indirectly through nest abandonment as a result of nearby Project-related disturbances.</p> <p>Mitigation Measure BR-6 requires pre-investigation surveys for ring-tailed cats and if an active ring-tailed cat nest is found, the Project shall be redesigned to avoid the loss of the site occupied by the nest if feasible. And where it is not feasible to redesign the project Mitigation Measure BR-6 provides strict requirements to ensure that disturbance to ring-tailed cat and its habitat will be avoided or minimized. Conducting pre-investigation surveys for ring-tailed cats and following avoidance and minimization measures as described in Mitigation Measure BR-6 will reduce the impact on the species to a less than significant level because impacts to ring-tailed cat will be avoided. (FEIR Volume 3, pp. 4.3-72 - 4.3-73.)</p>
<p><b>IMPACT BR-7: Disturbance of Nelson's Bighorn Sheep.</b> Implementation of the proposed Project may result in human disturbance that can alter habitat use and activity patterns of Nelson's bighorn sheep which are known to occur at the Project Site.</p>	<p><b>Mitigation Measure BR-7: Disturbance of Nelson's Bighorn Sheep.</b> If a bighorn sheep is observed at the Project Site during soil investigation activities, work shall be halted in the vicinity of the sheep (within 250 feet of the sheep). Project activities can recommence after the animal moves away on its own.</p>	Less than Significant	<p><b>Finding:</b> DTSC finds that changes or alterations have been required in, or incorporated into, the project which avoid or substantially lessen this significant environmental effect as identified in the FEIR.</p> <p><b>Facts in Support of Finding:</b> The primary risk to Nelson's bighorn sheep is disturbance during soil investigation activities from noise or visual disruptions. Habitat loss is not expected as no lambing habitat occurs on-site and any vegetation community impacts within suitable foraging areas would be temporary. There is evidence that human disturbance can alter habitat use and activity patterns of bighorn sheep, although the response to disturbance varies among individuals and with degree of previous exposure to human contact. Potential disturbance could include disruption of the</p>

**TABLE 1**  
**TABLE OF SIGNIFICANT IMPACTS, MITIGATION MEASURES, AND CEQA FINDINGS OF FACT**

Significant Environmental Impact	Mitigation Measures	Level of Significance after Mitigation	Findings of Fact
			<p>movement of sheep passing through the area from late October to mid-May, as inferred in the northern portion of the site from the observed presence of burro and sheep trails (PG&amp;E 2014c). However, sightings near the Station indicate that sheep have already habituated to human activities in and around the Station, including operations and maintenance activities at the Station, vehicle traffic on roads, and the general presence of people in the area.</p> <p>There would be no permanent loss of habitat and Nelson's bighorn sheep are likely habituated to human activities in and around the Station. Implementation of Mitigation Measure BR-7 would ensure impacts from the Project would remain less than significant. (FEIR Volume 3, pp. 4.3-73 - 4.3-74).</p>
<p><b>IMPACT BR-8: Disturbance or Loss of Special-status Bat Species.</b> Effects to special-status bat species (which includes the pallid bat, the Townsend's big-eared bat, and any other special-status bat species that may be found at the site) would be considered significant if project activities would result in the loss or abandonment of a maternity roost or nursery site, which could result in significant effects to the overall population of the species. The Project could result in disturbance to maternity roosts on the Project Site given the presence of potential maternity roosting habitat. Potential direct and indirect impacts to the maternity roost of any special-status bat species would be significant. Implementation of the proposed Project could also result in the</p>	<p><b>Mitigation Measure BR-8: Disturbance or Loss of Special-status Bat Species.</b> The following measures shall be implemented to avoid impacts to active maternity roosts of special-status bat species during the maternity roosting season (mid-March through August) and direct harassment, injury or mortality to Townsend's big-eared bats, consistent with the California Fish and Game Code.</p> <p>a. Implementation of soil investigation activities within avoidance areas for potential bat maternity roosting habitat shown in Figure 4.3-5 shall not occur during the maternity season (mid-March through August) with the exception of those activities described in b. However, if soil investigation activities critical to meeting the Project objectives are determined necessary in avoidance areas for potential bat maternity roosting habitat (Figure 4.3-5) during the maternity season, a qualified biologist shall conduct a pre-investigation survey to identify potential active roosts. The pre-investigation survey shall occur the night before soil investigation activities to observe if any bats are exiting crevices and cavities within 100 feet of the proposed work area. The pre-investigation survey will be conducted at sunset for 90 minutes by a qualified biologist with the use of a thermal imaging camera to observe and record any exiting</p>	Less than Significant	<p><b>Finding:</b> DTSC finds that changes or alterations have been required in, or incorporated into, the Project which avoid or substantially lessen this significant environmental effect as identified in the FEIR. To the extent DTSC lacks jurisdiction over specific parcels within the Project area, DTSC also finds that the changes or alterations are within the responsibility and jurisdiction of another public agency and have been, or can and should be, adopted by that other agency.</p> <p><b>Facts in Support of Finding:</b> The primary risk to special-status bat species would be from potential Project-related disturbances to foraging habitat and active day and maternity roost sites during soil investigation activities. Project-related impacts to special-status bats would be considered significant if the action would result in the loss of a maternity roost or result in the greater population of the species to drop below self-sustaining levels.</p> <p>Townsend's big-eared bat is a candidate species for listing under the CESA, and as such, is afforded protection by CDFW similar to other CESA listed</p>

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disturbance of day roosts and other harassment, injury or mortality of individual Townsend's big-eared bats. A single male Townsend's big-eared bat was observed on the Project Site during the spring 2015 focused bat surveys and this species is considered present. Additionally, due to the presence of suitable habitat on-site, this species has the potential to use the Project Site for foraging and roosting. Due to their heightened sensitivity as a Candidate species under CESA (as of April 2013), any harassment, injury or mortality of individual Townsend's big-eared bats would be considered significant. The Project's potential to result in direct and indirect impacts to active Townsend's big-eared bat roosts and individuals would therefore be significant.	<p>bats. If no bats are observed, work may proceed in the proposed work area the following day, and will remain cleared for the duration of the work activity. Additional pre-investigation surveys will be required in new work areas located more than 100 feet away from the previously surveyed work area. If active roosts are observed (i.e., bats exiting from semi-consolidated sediment or rock), no soil investigation activities may take place in the proposed work area the following day and not until it can be verified with thermal imaging that bats have left the area or the maternity roosting season is over.</p> <p>b. Some soil investigation activities will be allowed to occur without a pre-investigation survey in limited work areas located within the larger avoidance areas depicted on Figure 4.3-5 during the bat maternity season (mid-March through August). These activities are limited to: pedestrian foot traffic; non-construction transportation vehicles; use of hand tools; and low noise groundwater sampling by submerged pump powered either by electric line, battery or small generator that emits 59 decibel or less at 33 meters and is located a minimum of 20 meters away from potential maternity roosting habitat.<sup>1</sup> Additional discrete ongoing activities may also continue to occur in the bottom of the wash areas depicted, including pedestrian and passenger car access for cultural surveys, educational tours and groundwater sampling, and activities associated with the approved 2011 Groundwater Remediation Project.</p> <p>c. If Project related work will continue into the 2016 bat maternity season, additional focused bat surveys for Townsend's big-eared bats will be required, since changes in the presence or absence of Townsend's big-eared bats could</p>		<p>species. This protection is greater than that afforded to CSC species. Due to the sensitivity of the Townsend's big-eared bat, any Project-related impact to this species would be considered a significant impact. Although Townsend's big-eared bats have not been determined to be present at the Project Site, the potential for the occurrence of this species exists due to the presence of suitable habitat.</p> <p><i>Roosting</i></p> <p>The special-status bat species with a potential to occur and known to occur on the Project Site generally roost (day roost) in crevices located in rocky outcrops and cliffs, caves, mines, trees, and structures such as buildings and bridges, hanging from walls and ceilings, and with an available drop off for flight. Day roosts may be used by bats during the day time for sleeping (torpor) and can consist of individuals, groups of males (bachelor roost), or a colony of bats.</p> <p>The Project Site provides suitable roosting habitat for special-status bat species particularly within the crevices and small mammal burrows along cliff faces and slopes associated with the desert washes on the Site. At the time of the January 2015 bat habitat assessment, no roosting activity was observed on the Project Site, which is typical given the time of year, but suitable roosting habitat was observed on the Project Site that could support day roosting for special-status bats. Project activities are proposed primarily within upland areas and the channel bottom of desert washes; however some permanent roosting habitat loss may occur as a result of Project activities along slopes that contain rock crevices</p>

<sup>1</sup> Limited work areas were identified in the spring 2015 focused bat survey report (PG&E 2015c) as areas in the bottom of the washes that do not contain bat roosting habitat where some limited, non-noisy soil investigation activities may occur during the bat maternity roosting season. The list of allowable soil investigation activities was developed by Dr. Dave Johnson, Associate Wildlife Ecologist and Bat Biologist (Johnson 2015).

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	<p>occur. A focused bat survey shall be required no more than 30 days prior to the start of Project field implementation during the 2016 bat maternity season to specifically determine if any Townsend's big-eared bats are present on or immediately adjacent to work areas. If Townsend's big-eared bats are detected, Mitigation Measure BR-8d shall be required.</p> <p>d. If Townsend's big-eared bat, a Candidate species under CESA, is observed or detected on the Project Site during the surveys described in Mitigation Measures BR-8a or BR-8c, the Project shall be modified if necessary, with input from a qualified biologist, to avoid all potential harassment, impact or injury to this species. If the Project cannot be modified to avoid impacts to the Townsend's big-eared bat, removal or modification of roosts could occur if approved by CDFW and when the roost is vacant. Prior to disturbance of the roost, the CDFW will be notified to review and approve the proposed procedures (such as the use of exclusion devices or other roost modification) to ensure that no injury or impact occurs as a result of the action.</p>		<p>and cliff faces, as well as a temporary disturbance to vegetation, washes and slopes. Project-related impacts to a day roost (bachelor roost) of a Townsend's big-eared bat would be considered significant because potential impacts to a Candidate species that may result in injury or mortality require consultation with CDFW.</p> <p><i>Maternity Roosting</i></p> <p>Due to the presence of suitable roosting habitat and observed bat activity during the winter season, there is a potential for maternity roosting to occur on the Project Site. Maternity roosting habitat is similar to day roosting habitat, but a maternity roost contains one or several lactating female bats raising their young (pups). Maternity roosts are afforded additional protection because they are considered bat nursery sites that contains the next generation of bats (pups) that are unable to fly or feed themselves. Project activities that occur during the maternity roosting season of mid-March through August may result in potential direct and indirect impacts to a bat maternity roost.</p> <p>Potential Project-related impacts to maternity roosting bats from increased human activity, noise and vibration can be considered a significant impact if the level of disturbance results in the abandonment of a maternity roost (CalTrans 2004). Project-related impacts, even indirect and temporary in nature, that results in the disturbance to a maternity roost for special-status bat species is considered a significant impact.</p> <p>Implementation of Mitigation Measure BR-8 would avoid impacts to active maternity roosts of special-status bat species during the maternity roosting season (mid-March through August) and direct harassment, injury or mortality to Townsend's big-eared bats and therefore ensure impacts from the Project would remain less than significant. (FEIR Volume 3, pp. 4.3-74- 4.3-79).</p>

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<b>IMPACT BR-11: Substantial Interference with Fish or Wildlife Movement Corridors or Native Wildlife Nursery Sites.</b> Implementation of the proposed Project would not substantially interfere with the movement of any native resident or migratory fish or wildlife species, or with established native resident or migratory wildlife corridors, or impede the use of native wildlife nursery sites. However, the Project could impede the use of bat maternity roosts, which are considered a type of native wildlife nursery site. Modifying, destroying or impeding the use of active maternity roosts of special-status bat species could result in substantial interference to the species reproduction and distribution.	Mitigation Measure BR-8 shall be implemented to address potential impacts to special-status bat maternity roosts.	Less than Significant	<p><b>Finding:</b> DTSC finds that changes or alterations have been required in, or incorporated into, the Project which avoid or substantially lessen this significant environmental effect as identified in the FEIR. To the extent DTSC lacks jurisdiction over specific parcels within the Project area, DTSC also finds that the changes or alterations are within the responsibility and jurisdiction of another public agency and have been, or can and should be, adopted by that other agency.</p> <p><b>Facts in Support of Finding:</b> The Project Site contains suitable bat maternity roosting areas, particularly within Bat Cave Wash and the East Ravine, for a number of common and special-status bat species known to occur on and in the vicinity of the Site. As currently designed, the proposed soil investigation activities that would occur within Bat Cave Wash and the East Ravine may result in impacts to active bat maternity roosts. A Project-related impact to a maternity roost containing a special-status bat species is considered a significant impact.</p> <p>Conducting pre-investigation surveys for bats and following avoidance and minimization measures as described in Mitigation Measure BR-8 would reduce the impact on maternity roosts for special-status bat species to a less than significant level. (FEIR Volume 3, pp. 4.3-84- 4.3-85).</p>
<b>Cultural Resources</b>			
<b>IMPACT CR-1: Potential Impacts to the Topock Traditional Cultural Property.</b> Implementation of the proposed Project could cause a substantial adverse change in the significance of the historical resource identified as the Topock TCP as a result of the physical destruction and alteration to the	<b>Mitigation Measure CR-1: Historical Resource Identified as the Topock TCP</b> <b>CR-1a: Tribal Coordination</b> <i>CR-1a-1: Tribal Document Review and Comment.</i> . Interested Tribes shall continue to be afforded the opportunity to review and comment on all cultural resources-related documentation prepared as a result of this Project. Tribal comments shall be considered to the extent feasible by DTSC, in coordination with Interested	Significant and Unavoidable	<p><b>Finding:</b> DTSC finds that changes or alterations have been required in, or incorporated into, the Project that substantially lessen, but not to a less than significant level, this significant environmental impact. Even with the implementation of the mitigation measures outlined for Impact CR-1, the project retains the potential to result in significant impacts to the Topock Traditional Cultural Property (TCP). Since no feasible mitigation measures or alternatives are available to reduce this</p>



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<p>characteristics of the property that convey its historical significance and qualify it for inclusion in the CRHR as defined in CEQA Guidelines Section 15064.5. The substantial adverse change to the TCP and its contributing elements would result from ground-disturbing activity that would directly and adversely affect the soil, landforms, and unknown prehistoric archaeological resources; pruning or alteration of the natural growth of native and traditional plant species; plant and biota sampling; and the presence of equipment, workers, and vehicles, which would introduce activities that are inconsistent with the natural setting associated with the Topock TCP. These activities would also materially affect the cultural values ascribed to the TCP by Tribes.</p>	<p>Tribes, PG&amp;E, and representative landowners (BLM, BOR, FMIT, PG&amp;E, and USFWS). Cultural resources documents shall include, but not be limited to, pre-investigation verification survey memoranda; daily archaeological monitoring logs; monitoring report to be prepared at the close of ground-disturbing activities; annual monitoring reports; DPR forms; and any documentation arising as a result of the inadvertent discovery of potential historical resources of a Tribal nature pursuant to CR-2d (Inadvertent Discovery of Potential Historical Resources and Unique Archaeological Resources). Interested Tribes shall also be afforded the opportunity to review and comment on technical documents including, but not limited to, soil investigation-related plans and reports, bench and pilot study implementation plans, and biological resources reports.</p> <p><b>CR-1a-2: Tribal Access.</b> Interested Tribes shall be provided access to the Project Site to the extent PG&amp;E has the authority to facilitate such access and be consistent with existing laws, regulations, and agreements as they pertain to property within the Project Site. On federal property, access shall be governed by the provisions of Appendix B (<i>Tribal Access Plan</i>) of the CHPMP. On non-federal property, access shall be accommodated by PG&amp;E to the extent feasible; the access plan may place restrictions on access into certain areas, such as the Station and the existing evaporation ponds, subject to DTSC review with regard to health and safety concerns and to ensure noninterference with approved investigation activities. PG&amp;E shall retain copies of all access-related communications to be provided to DTSC on a quarterly basis, as required by CR-1a-3.</p> <p><b>CR-1a-3: Tribal Communication.</b> <i>Tribal Communication.</i> Consistent with past practices and the communication processes previously entered into by PG&amp;E with Interested Tribes, PG&amp;E shall continue to communicate with Interested Tribes prior to the start of and during investigation activities for the Project. PG&amp;E shall document, and accommodate where feasible, the Tribes' preferences for method of communication and for transmitting large documents, and shall seek to avoid scheduling conflicts between scientific survey (i.e., pre-investigation historical</p>		<p>impact to a less than significant level, this impact remains significant and unavoidable.. DTSC further finds that complete avoidance of direct and indirect effects of the project to the TCP is not feasible. This is because the soil investigation activities are necessary to gather sufficient information to reliably characterize the nature and extent of soil and sediment contamination within the Project Site, enabling completion of the Final RFI/RI Report Volume 3 (Soil) and risk assessment as required by the 1996 Consent Agreement as soon as practicable and consistent with applicable state laws and regulations.</p> <p><b>Overriding Considerations:</b> The environmental, economic, social and other benefits of the project override this significant adverse impact of the project, as is more fully stated in the Statement of Overriding Considerations.</p> <p><b>Facts in Support of Finding:</b> DTSC has determined that implementation of the Project would result in an adverse impact on the National Register of Historic Places-eligible Topock Traditional Cultural Property (TCP). According to input from Interested Tribes, those physical characteristics that convey the TCP's historical significance (contributing elements) include the Topock Maze, land, water, plants, animals, prehistoric archaeological resources, and the viewshed (see FEIR Volume 3, Section 4.4.1.5). All of these contributing elements to the Topock TCP could be affected by the Project, with the exception of the Topock Maze, known prehistoric archaeological resources, water, and animals.</p> <p>Implementation of the Project, in addition to the other ongoing activities within the Topock TCP, could cause a substantial adverse change in the significance of the TCP historical resource as a result of the physical destruction and alteration to the characteristics of the property that convey its historical significance and</p>

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	<p>resources verification survey, annual historical resources monitoring, and biological resources survey) and Topock-related meeting activities to the greatest extent possible. Outreach efforts between the Interested Tribes and PG&amp;E shall be communicated by PG&amp;E to DTSC quarterly during investigation activities for review and input.</p> <p>Communication protocols as they relate to Tribal involvement in the worker cultural resources sensitivity training shall be governed by CR-1b.</p> <p>Communication protocols as they relate to Tribal monitoring of scientific survey and Project-related ground-disturbing activities shall be governed by CR-1d.</p> <p>Communication protocols as they relate to Tribal monitoring of annual historical resource monitoring shall be governed by CR-2c.</p> <p>Communication protocols as they relate to inadvertent discoveries of potential historical resources as defined by CEQA will be governed by CR-2d. Human remains will be governed by CR-4.</p> <p><b>CR-1b: Worker Education Program</b></p> <p>A worker cultural resources sensitivity program shall be implemented in addition to any requirements under the PA and CHPMP, but may be integrated in a manner that avoids duplication of requirements under the PA and CHPMP. Specifically, an initial sensitivity training session shall be provided by PG&amp;E to all Project employees, contractors, subcontractors, and other professionals prior to their involvement in any ground-disturbing activities, with subsequent training sessions to be held as new personnel become involved in the Project. PG&amp;E shall invite Interested Tribes to participate in and present Tribal perspectives during the training sessions. The sensitivity program shall address: the cultural (Native American, archaeological, and paleontological) sensitivity of the Project Site and a tutorial providing information on how to identify these types of resources; appropriate behavior; worker access routes and restrictions; work area cleanliness; procedures to be followed in the event of an inadvertent discovery; safety procedures when working with monitors; and consequences in the event of noncompliance. PG&amp;E shall notify DTSC and the</p>		<p>qualify it for inclusion in the California Register of Historical Resources as defined in CEQA Guidelines Section 15064.5. The substantial adverse change to the contributing elements to the Topock TCP would result from ground-disturbing activity that would directly and adversely affect the soil, landforms, and unknown prehistoric archaeological resources; pruning or alteration of the natural growth of native and traditional plant species; plant and biota sampling; and the presence of equipment, workers, and vehicles, which would introduce activities that are inconsistent with the natural setting associated with the Topock TCP. These activities would also materially affect the cultural values ascribed to the TCP by some Native American Tribes. This impact would be significant. (Impact CR-1)</p> <p>In order to reduce these impacts, Mitigation Measures CR-1a, CR-1b, CR-1c, CR-1d, and CR-1e shall be implemented. Implementation of Mitigation Measures CR-1a through CR-1e will reduce but not completely avoid the potential for significant impacts to the historical resources identified in as the Topock TCP. The Project would result in the destruction or alteration of contributing elements which convey the historical significance of the Topock TCP. As a result, the impacts to the historical resource identified as the Topock TCP would remain significant and unavoidable. (see FEIR Volume 3, pp. 4.4-69-4.4-82).</p> <p>The Project is approved notwithstanding these effects because the soil investigation activities are necessary to gather sufficient information to reliably characterize the nature and extent of soil and sediment contamination within the Project Site, enabling completion of the Final RFI/RI Report Volume 3 (Soil) and risk assessment as required by the 1996 Consent Agreement as soon as practicable and consistent with applicable state laws and regulations. The reasons for approving the Project</p>

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	<p>Interested Tribes no less than 2 weeks prior to the initial training session. Subsequent training sessions may be of a less formal nature; however, they must be comprehensive in the subject matter covered. Tribes will be provided the opportunity to participate in informal training sessions if available. PG&amp;E will keep records of training materials together with attendance rosters, and provide them to DTSC quarterly.</p> <p><b>CR-1c: Pre-Investigation Historical Resources Field Verification</b></p> <p><b>CR-1c-1: Personnel Qualifications Standards.</b> Cultural resources consulting staff shall meet, or be under the direct supervision of individuals meeting, the minimum professional qualifications standards (PQS) set forth by the Secretary of the Interior (codified in 36 CFR Part 61; 48 FR 44739). DTSC shall have approval authority over PG&amp;E's cultural resources consultant.</p> <p><b>CR-1c-2: Pre-Investigation Historical Resources Field Verification.</b> A pre-investigation historical resources field verification for soil sampling locations shall be conducted by PG&amp;E after approval of the work plan but not less than four weeks prior to the commencement of ground-disturbing activities in these locations. Additional field verifications may be completed as Project work progresses, provided the field portions of the verifications are conducted not less than four weeks prior to the start of ground disturbance in that area. Also, field verifications for contingency and pilot studies shall occur after approval work plan(s) but not less than four weeks prior to the start of ground disturbance. The field verification shall include all sampling locations, including any future pilot study areas, new access areas, and equipment and materials staging areas, plus a 50-foot buffer surrounding sampling areas where topography allows. Sampling activities may occur within the buffer area without additional field verification. Interested Tribes shall be afforded the opportunity to participate and shall be provided 2 weeks (14 calendar days) notice prior to the start of the field verification. The objective of the field verification will be to verify that additional resources qualifying as historical resources under CEQA are not present within the investigative location areas. Interested Tribes shall be afforded the</p>		<p>notwithstanding its environmental impacts are further discussed in the Statement of Overriding Considerations.</p>

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	<p>opportunity to identify, and DTSC to consider, for the purposes of avoidance, any physical features of Tribal significance within the field verification area, including but not limited to trails, rock features, desert pavement areas, and cleared circles that might be considered contributors to the TCP. <i>Pre-Investigation Historical Resources Field Verification Memoranda</i> following the California Office of Historic Preservation's (OHP's) <i>Archaeological Resource Management Reports (ARMR)</i> guidelines, shall be prepared by PG&amp;E that documents the methods of the field verification, participants involved in the field verification, and the results of the field verification. Interested Tribes shall be invited to prepare a section that reports Tribal observations during the field verification, and asked to provide any observations to PG&amp;E within 2 weeks of the field portion of the verification. Memoranda shall be submitted to DTSC for review and comment no later than 10 days prior to the start of ground disturbance in an area, and the submission shall include any Tribal observations given to PG&amp;E within the two-week time frame set forth above. Tribal review and comment of <i>Pre-Investigation Historical Resources Field Verification Memoranda</i> shall be governed by CR-1a-1.</p> <p>In the event that resources qualifying as historical resources under CEQA are found in the investigation areas, including physical features of traditional cultural value to Interested Tribes as contributors to the TCP or archaeological resources, are identified during the field verification, treatment of such resources shall be governed by procedures outlined in CR-1e and CR-2, respectively. If avoidance of the identified resources is determined by DTSC, in coordination with respective landowners, Interested Tribes, and PG&amp;E to be infeasible because it would impede the fundamental Project objective to obtain sufficient information to allow for a complete soil characterization of the area, protective actions (such as elevated ramps, protective coverings or other types of temporary capping) shall be taken to reduce or minimize impacts to the resource to the maximum extent feasible. Any protective measures would be implemented in coordination with DTSC. Work areas would be restored to pre-investigation conditions consistent with CR-1e-6.</p>		

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	<p><b>CR-1d: Cultural Resources Monitoring Program</b></p> <p>The Cultural Resources Monitoring Program shall be consistent with Appendix C (<i>Topock Remediation Project Programmatic Agreement Tribal and Archaeological Monitoring Protocols</i>) of the PA and Section 6.6.4, “<i>Construction Monitoring</i>,” of the CHPMP. PG&amp;E shall include DTSC as a party requiring notification and coordination along with the parties already listed in the Appendix C Monitoring Protocols.</p> <p>Archaeological monitoring shall be conducted during all Project-related ground-disturbing activities for the purpose of identifying and avoiding impacts to archaeological resources that could potentially qualify as historical resources under CEQA. Archaeological monitors shall work under the direct supervision of an archaeologist meeting the PQS as described in CR-1c-1 and shall complete daily monitoring logs. Upon completion of investigation activities, a Soil Investigation Monitoring Report shall be prepared following ARMIR guidelines. The monitoring report shall document dates of monitoring and monitoring participants, activities observed, soil types observed, and any archaeological resources encountered. PG&amp;E shall provide Interested Tribes an opportunity to contribute their observations to the monitoring report. To be included in the monitoring report, the Tribal section must be provided to PG&amp;E within 8 weeks after completion of monitoring activities. DPR 523 forms, following the OHP’s <i>Instructions for Recording Historical Resources</i>, shall be prepared and filed with the SBAIC for all newly identified and updated resources and shall be appended to the monitoring report. The report shall be provided to the Tribes for review and comment consistent with CR-1a-1. The report shall be provided to DTSC and the Tribes for review and comment within 16 weeks of Project completion.</p> <p>Interested Tribes shall be invited to monitor during scientific survey (as defined in CR- 1a-3) and all ground-disturbing activities associated with the Project.</p> <p>PG&amp;E shall provide Tribal monitors with reasonable compensation consistent with historic rates, for all monitoring work performed. Interested Tribes shall be afforded a minimum of 1 week’s notice prior to the commencement of project-related ground-disturbing</p>		

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	<p>activities. During Project activities, Interested Tribes shall be provided with weekly work forecasts to facilitate scheduling of monitors. Because Project implementation activities are often unpredictable, there may be changes in work activities. Interested Tribes shall be notified by PG&amp;E of any scheduling changes as soon as possible. PG&amp;E will utilize daily field meetings, telephone, and email as methods of communicating work schedules. Tribal Monitors shall be alerted at the end of each work day whether work activities will be taking place the following day.</p> <p><b>CR-1e: Protective Measures for the Topock TCP</b></p> <p><b>CR-1e-1: Avoidance and Preservation in Place.</b> PG&amp;E shall carry out, and require all subcontractors to carry out, all Project activities in ways that minimize significant impacts to resources associated with the Topock TCP consistent with Stipulation I (B) of the PA and Section 7.1 of the CHPMP, and to the maximum extent feasible as it relates to the Project objectives of soil characterization as determined by DTSC, in coordination with PG&amp;E, Interested Tribes, and respective landowners.</p> <p><b>CR-1e-2: Restrict Personnel Access Beyond Delineated Work Areas.</b> Work areas (including sampling locations, new access areas, and materials and equipment staging areas) shall be fenced, or otherwise delineated, in coordination with Tribal monitors to prevent incursion of personnel outside of designated work areas.</p> <p><b>CR-1e-3: Prioritized use of Previously Disturbed Areas.</b> To minimize impacts to intact landforms and natural features important to Tribes as part of the Topock TCP, priority shall be given to siting project elements that have not formerly been subject to Tribal review and input as part of the Soil Work Plan (including the potential 25 percent contingency samples, bench scale tests, pilot studies, and geotechnical evaluations) within previously disturbed areas (areas disturbed within the last 50 years) over undisturbed or pristine areas to the maximum extent feasible as determined by DTSC, in coordination with Interested Tribes, PG&amp;E, and respective landowners. Interested Tribes shall be afforded the opportunity to express, and DTSC shall consider, whether there are specific instances where disturbed areas may be</p>		

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Significant Environmental Impact	Mitigation Measures	Level of Significance after Mitigation	Findings of Fact
	<p>more culturally sensitive than non-disturbed areas.</p> <p><b>CR-1e-4: Avoidance of Indigenous Plants of Biological and Cultural Significance.</b> Prior to Project initiation, a qualified biologist capable of identifying both native and non-native plants within the region (to species) shall flag (or otherwise mark) indigenous plant specimens that shall be protected and avoided. The qualified biologist shall educate all on-site Project personnel about the indigenous plants prior to their involvement in Project activities at the Project Site. During Project activities, a biological monitor shall be present at all times to ensure the indigenous plant species of biological and traditional cultural significance as identified in Appendix D-3 of this DEIR are protected and avoided during Project implementation to the extent practicable. Flagging of indigenous plant species and worker education (consistent with CR-1b) shall occur prior to Project initiation. Protection of identified species shall occur through biological monitoring during investigative activities and Project implementation.</p> <p><b>CR-1e-5: Minimize Noise Disturbances.</b> Impacts to the natural auditory setting associated with the TCP shall be minimized to the extent feasible as governed by NOI-1.</p> <p><b>CR-1e-6: Work Area Restoration.</b> As discussed in the “Project Description,” Section 3.5.6, following completion of work in each work area, all Project equipment and materials shall be removed from the work areas. If the area is not paved, the area will be raked/brushed to remove tire tracks and restored to substantially the same condition(s) as prior to the soil investigation sampling, to minimize impacts to the natural environment associated with the Topock TCP.</p> <p><b>CR-1e-7: Displaced Soil Procedures.</b> Treatment, handling, and disposition of Resource Conservation and Recovery Act (RCRA) and non-RCRA hazardous materials, nonhazardous materials, and clean materials shall comply with <i>Management Protocol for Handling and Disposition of Displaced Site Material, Topock Remediation Project, Needles, CA</i> of the Soil RCRA Facility Investigation/Remedial Investigation Work Plan. Soil export, including clays, and soil import will be limited where feasible as</p>		

**TABLE 1**  
**TABLE OF SIGNIFICANT IMPACTS, MITIGATION MEASURES, AND CEQA FINDINGS OF FACT**

Significant Environmental Impact	Mitigation Measures	Level of Significance after Mitigation	Findings of Fact
	<p>determined by DTSC, consistent with the <i>Protocol</i>.</p> <p><b>CR-1e-8: Technical Review Committee.</b> The Technical Review Committee (TRC), constituting a multidisciplinary panel of independent scientific and engineering experts to advise the Interested Tribes, shall continue through soil remedy selection and construction phase of the Groundwater Remedy (whichever comes later), at which time the necessity and dollar value of the TRC shall be assessed by PG&amp;E and, with the approval of DTSC, shall either be extended, reduced, or terminated. This TRC is the same committee established by CUL-1a-4 of the January 2011, Certified Groundwater Remedy EIR.</p> <p><b>CR-1e-9: Open Grant Funding.</b> Open grant funding, constituting two part-time cultural resource specialist/project manager positions, shall continue through soil remedy selection and construction phase of the Groundwater Remedy (whichever comes later), at which time the necessity and dollar value of the open grant program shall be assessed by PG&amp;E and, with the approval of DTSC, shall either be extended or terminated. This Open Grant Funding is the same as established by CUL-1a-11 of the January 2011, Certified Groundwater Remedy EIR.</p>		
<p><b>IMPACT CR-2: Potential Impacts to Known and Unknown Historical Resources and Unknown Unique Archaeological Resources.</b> Impacts to known historical resources will be less than significant. No known unique archaeological resources have been identified within the Project Site. Implementation of the proposed Project could, however, cause a substantial adverse change in the significance of unknown historical resources (other than the TCP) and unknown unique archaeological resources pursuant to CEQA Guidelines Section 15064.5 resulting</p>	<p><b>Mitigation Measure CR-2: Historical Resources (Other than the Topock Traditional Cultural Property [TCP]) and Unique Archaeological Resources.</b></p> <p><b>CR-2a: Avoidance and Preservation in Place.</b> PG&amp;E shall carry out, and require all subcontractors to carry out, all investigation activities in ways that avoid significant impacts to historical resources consistent with General Principle I(B) of the PA and Section 7.3 of the CHPMP to the maximum extent feasible as it relates to the Project objectives of soil characterization as determined by DTSC, in coordination with Tribes, PG&amp;E, and respective landowners.</p> <p><b>CR-2b: Additional Protective Measures.</b> <i>Additional Protective Measures.</i> Mitigation Measures CR-1a through CR-1d, CR-1e-2, and CR-1e-3 shall be implemented to further reduce impacts to historical resources (other than the Topock TCP) and unique archaeological resources.</p>	Significant and Unavoidable	<p><b>Finding:</b> DTSC finds that changes or alterations have been required in, or incorporated into, the Project that substantially lessen, but not to a less than significant level, this significant environmental impacts. Even with the implementation of the mitigation measures outlined for Impact CR-2, the project retains the potential to result in significant impacts to known and unknown historical resources and unknown unique archaeological resources. Since no feasible mitigation measures or alternatives are available to reduce this impact to a less than significant level, this impact remains significant and unavoidable DTSC further finds that complete avoidance of direct and indirect effects of the project to unknown historical resources and unknown unique archaeological resources is not feasible. This is because the soil investigation activities are necessary to gather sufficient information to reliably characterize the nature</p>



**TABLE 1**  
**TABLE OF SIGNIFICANT IMPACTS, MITIGATION MEASURES, AND CEQA FINDINGS OF FACT**

Significant Environmental Impact	Mitigation Measures	Level of Significance after Mitigation	Findings of Fact
from ground-disturbing activity.	<p><b>CR-2c: Annual Historical Resources Monitoring Program.</b> PG&amp;E shall add the known 20 historical resources (including 15 archaeological resources and 5 historic-period built resources located within the Project Site [see Table 4.4-3]), plus any additional historical resources that may be identified during Project implementation, to the established annual monitoring program as prescribed by Section 6.6.5, "Periodic Site Monitoring," of the CHPMP. Monitoring shall continue on an annual basis (or less frequently as determined by DTSC) until completion of the soil investigation. PG&amp;E shall afford Tribes the opportunity to participate in Tribal monitoring during the annual monitoring program and provide, at a minimum, 2 weeks' written notice to Tribes prior to the commencement of annual monitoring.</p> <p><b>CR-2d: Inadvertent Discovery of Potential Historical Resources and Unique Archaeological Resources.</b> In the event that resources potentially qualifying as historical resources or unique archaeological resources per CEQA Guidelines Section 15064.5 are inadvertently discovered during ground-disturbing activities, work in the vicinity of the discovery shall immediately cease within a 50-meter radius and temporary protective measures shall be implemented. The radius of the protected area may be modified if determined appropriate by DTSC, BLM, PG&amp;E, and the Tribal Monitor with final approval by DTSC on non-federal and private land and final approval by BLM on federal land. PG&amp;E shall notify DTSC within 24 hours of the discovery of any potential historical or unique archaeological resources. Avoidance and preservation in place shall be the preferred manner of mitigating impacts to such resources to maintain the important relationship between artifacts and their archaeological context in order to preserve each resource's scientific value, as well as to preserve the cultural values ascribed to resources by the Tribes. The feasibility of avoidance, as it relates to the Project objectives, shall be determined by DTSC, in coordination with PG&amp;E, Tribes, and respective landowners. Preservation alternatives for consideration shall include: avoidance, data recovery of the materials associated with the resource, and capping. Tribes generally prefer avoidance over data recovery or capping.</p>		<p>and extent of soil and sediment contamination within the Project Site, enabling completion of the Final RFI/RI Report Volume 3 (Soil) and risk assessment as required by the 1996 Consent Agreement as soon as practicable and consistent with applicable state laws and regulations.</p> <p><b>Overriding Considerations:</b> The environmental, economic, social and other benefits of the project override this significant adverse impact of the project, as is more fully stated in the Statement of Overriding Considerations.</p> <p><b>Facts in Support of Finding:</b> In addition to the Topock TCP, a total of 20 known historical resources are located within the Project Site, including 15 significant archaeological resources and five historic-period built resources. The Project as designed will avoid significant impacts to known historical resources. However, because the Project involves ground-disturbing activities, there is the potential for such activities to disturb unknown potentially significant resources qualifying as historical resources under CEQA. Ground-disturbing activities associated with the Project have the potential to cause substantial adverse changes to unknown historical resources. Any damage to or destruction of such resources during the discovery process could result in significant impacts. Because prehistoric archaeological resources are considered contributing elements to the Topock TCP any inadvertent discoveries would be significant given their relationship as contributing elements to the Topock TCP. (Impact CR-2).</p> <p>In order to reduce these impacts, Mitigation Measures CR-2a, CR-2b, CR-2c, and CR-2d shall be implemented.</p> <p>Mitigation Measures CR-2a through CR-2d will ensure avoidance of significant impacts to known historical resources and will reduce impacts in the event of</p>

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**TABLE OF SIGNIFICANT IMPACTS, MITIGATION MEASURES, AND CEQA FINDINGS OF FACT**

Significant Environmental Impact	Mitigation Measures	Level of Significance after Mitigation	Findings of Fact
	<p>Treatment of discoveries shall be managed under Stipulation IX, “Discoveries” of the PA and Section 8, “Discoveries” and Appendix C, “Discovery Plan” of the CHPMP. PG&amp;E shall notify DTSC and coordinate with the parties already listed in the Appendix C Discovery Plan protocols. Avoided resources may be determined discretionarily eligible by DTSC pursuant to CEQA Section 15064.5(a)(3) as individual resources eligible for listing in the NRHP and the CRHR and as contributors to the Topock TCP. In the event, data recovery is the only feasible mitigation available, resources subject to data recovery shall be evaluated for individual listing in the NRHP and CRHR and as contributors to the Topock TCP, taking into consideration all four register criteria, and as unique archaeological resources. Curation of recovered archaeological materials recovered from federal lands shall be consistent with Stipulation XIII(A) and (B) of the PA. Curation of recovered materials from non-federal lands shall be coordinated by and between DTSC, Tribes, and the respective landowner.</p>		<p>inadvertent discovery of unknown historic-period archaeological resources, potentially qualifying as historical resources or unique archaeological resources under CEQA, to a less than significant level. However, even with the implementation of Mitigation Measures CR-2a through CR-2d, impacts to historical resources and unique archaeological resources resulting from the inadvertent discovery of unknown prehistoric archaeological resources would be significant and unavoidable given their relationship as contributing elements to the Topock TCP. Therefore, impacts to known and unknown historical resources would remain significant and unavoidable. (see FEIR Volume 3, pp.4.4-79- 4.4-84).</p> <p>The Project is being approved notwithstanding these effects because the soil investigation activities are necessary to gather sufficient information to reliably characterize the nature and extent of soil and sediment contamination within the Project Site, enabling completion of the Final RFI/RI Report Volume 3 (Soil) and risk assessment as required by the 1996 Consent Agreement as soon as practicable and consistent with applicable state laws and regulations. The reasons for approving the Project notwithstanding its environmental impacts are further discussed in the Statement of Overriding Considerations.</p>
<p><b>IMPACT CR-3: Potential Impacts to Significant Paleontological Resources.</b> Implementation of the Project could directly or indirectly destroy a unique paleontological resource or site or unique geologic feature as a result of ground disturbing activity.</p>	<p><b>Mitigation Measure CR-3: Paleontological Resources</b></p> <p><b>CR-3a: Worker Education Program</b></p> <p>PG&amp;E shall fully enforce participation in the Worker Education Program as governed by CR-1b to ensure personnel awareness of cultural and paleontological sensitivities associated with the Project Site.</p> <p><b>CR-3b: Inadvertent Discovery of Paleontological Resources</b></p> <p>In the event of inadvertent discovery of paleontological resources, all work shall be halted within a 50-meter radius and temporary protective measures shall be implemented until the discovery can be</p>	Less than Significant	<p><b>Finding:</b> DTSC finds that changes or alterations have been required in, or incorporated into, the project which avoid or substantially lessen this significant environmental effect as identified in the FEIR.</p> <p><b>Facts in Support of Finding:</b> The impact will be less than significant after implementation of a worker education program, and the halting of work in the event of inadvertent discovery of paleontological resources until the discovery can be evaluated by a qualified paleontologist. Ground disturbing activities could potentially encounter paleontological resources, but</p>

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**TABLE OF SIGNIFICANT IMPACTS, MITIGATION MEASURES, AND CEQA FINDINGS OF FACT**

Significant Environmental Impact	Mitigation Measures	Level of Significance after Mitigation	Findings of Fact
	evaluated by a qualified paleontologist (defined as a paleontologist meeting the requirements of the Society of Vertebrate Paleontology [SVP, 2010]). The radius of the protected area may be modified if determined appropriate by DTSC, BLM, PG&E, and the qualified paleontologist with final approval by DTSC on non-federal and private land and final approval by BLM on federal land. Appropriate treatment of the discovery shall be determined by DTSC, in coordination with the qualified paleontologist, PG&E, and respective landowners. Based on the nature of the discovery, the qualified paleontologist shall also reassess the need to initiate paleontological monitoring and make recommendations of such to DTSC, PG&E, and the respective landowner. PG&E shall provide DTSC notification of any paleontological discoveries within 24 hours.		Mitigation Measure CR-3 will reduce impacts to any unique paleontological resource or site or unique geologic feature to a less than significant level through monitoring and treatment of any found resource in coordination with a qualified paleontologist. (FEIR Volume 3, pp. 4.4-84- 4.4-86.)
<b>IMPACT CR-4: Potential Impacts to Human Remains.</b> Implementation of the Project could, through the process of ground-disturbing activities, disturb human remains, including those interred outside of formal cemeteries.	<b>Mitigation Measure CR-4: Human Remains</b>  In the event of inadvertent discovery of human remains, all work shall be halted within a 50-meter radius and temporary protective measures shall be implemented. The radius of the protected area may be modified if determined appropriate by DTSC, BLM, PG&E, and the Tribal Monitor with final approval by DTSC on non-federal and private land and final approval by BLM on federal land. Avoidance and preservation in place shall be emphasized as the preferred manner of mitigation for human remains and disturbances shall be avoided to the maximum extent feasible as it relates to the Project objectives of soil characterization, as determined by DTSC, in coordination with Tribes, PG&E, and respective landowners. PG&E shall notify DTSC of any inadvertent discovery of human remains within 24 hours of the discovery.  On non-federal land, PG&E shall contact the San Bernardino County Coroner to evaluate the remains and follow the procedures and protocols set forth in Section 15064.4 (e)(1) of the California Environmental Quality Act. If the Coroner determines the remains are Native American in origin, the Coroner shall contact the NAHC. As provided in PRC Section 5097.98, the NAHC shall identify the person or persons believed to be most likely descended from the deceased Native American. The MLD shall be afforded the opportunity to provide recommendations concerning the future	Significant and Unavoidable	<b>Finding:</b> DTSC finds that changes or alterations have been required in, or incorporated into, the Project that substantially lessen, but not to a less than significant level, this significant effect on the environment. Even with the implementation of the mitigation measures outlined for Impact CR-4, the project retains the potential to result in significant impacts on unknown human remains. Since no feasible mitigation measures or alternatives are available to reduce this impact to a less than significant level, this impact remains significant and unavoidable. DTSC further finds that complete avoidance of ground-disturbing activities that could disturb human remains is not feasible. This is because the soil investigation activities are necessary to gather sufficient information to reliably characterize the nature and extent of soil and sediment contamination within the Project Site, enabling completion of the Final RFI/RI Report Volume 3 (Soil) and risk assessment as required by the 1996 Consent Agreement as soon as practicable and consistent with applicable state laws and regulations.  <b>Overriding Considerations:</b> The environmental, economic, social and other benefits of the project

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**TABLE OF SIGNIFICANT IMPACTS, MITIGATION MEASURES, AND CEQA FINDINGS OF FACT**

Significant Environmental Impact	Mitigation Measures	Level of Significance after Mitigation	Findings of Fact
	<p>disposition of the remains and any associated grave goods as provided in PRC 5097.98. Per PRC Section 5097.98, the landowner shall ensure that the immediate vicinity, according to generally accepted cultural or archaeological standards or practices, where the Native American human remains are located, is not damaged or disturbed by further development activity until the landowner has discussed and conferred with the MLD regarding their recommendations, taking into account the possibility of multiple human remains.</p> <p>On federal land, the BLM Havasu City Field Office shall be notified and human remain and associated funerary objects shall be treated pursuant to the Native American Graves Protection and Repatriation Act and in accordance with Sections IX and XIII of the PA and Section 8.2 and Appendix D of the CHPMP.</p>		<p>override this significant adverse impact of the project, as is more fully stated in the Statement of Overriding Considerations.</p> <p><b>Facts in Support of Finding:</b> Implementation of the Project could disturb human remains, including those interred outside of formal cemeteries. The lack of any identified human remains in the Project Site does not preclude the possibility that unknown human remains may be present given the length of human occupation of the area. Ground-disturbing activities could unearth unknown human remains, which would be significant. (Impact CR-4)</p> <p>In order to reduce this impact, Mitigation Measure CR-4 shall be implemented (FEIR Volume 3, pp. 4.4-86- 4.4-87).</p> <p>Mitigation Measure CR-4 will reduce potential impacts to human remains, however, not to a level below significance. As a result, any destruction or alteration of human remains to Native American Tribes in the extraordinary context of the Topock TCP would be significant. Therefore, impacts to human remains would remain significant and unavoidable.</p> <p>The Project is being approved notwithstanding these effects because the soil investigation activities are necessary to gather sufficient information to reliably characterize the nature and extent of soil and sediment contamination within the Project Site, enabling completion of the Final RFI/RI Report Volume 3 (Soil) and risk assessment as required by the 1996 Consent Agreement as soon as practicable and consistent with applicable state laws and regulations. The reasons for approving the Project notwithstanding its environmental impacts are further discussed in the Statement of Overriding Considerations.</p>

**TABLE 1**  
**TABLE OF SIGNIFICANT IMPACTS, MITIGATION MEASURES, AND CEQA FINDINGS OF FACT**

Significant Environmental Impact	Mitigation Measures	Level of Significance after Mitigation	Findings of Fact
Noise			
<p><b>IMPACT NOI-1: Potential to expose persons and noise-sensitive land uses to a substantial temporary or periodic increase in ambient noise levels and/or exceed standards established by San Bernardino County.</b> Ambient noise levels at existing noise-sensitive land uses may experience increased noise levels due to soil investigation activities for short term periods. The proposed Project would exceed applicable County standards for a place of worship and could result in a temporary substantial increase in ambient noise levels.</p>	<p><b>Mitigation Measure NOI-1: Potential Impacts to Noise Levels and Noise Standards.</b></p> <ol style="list-style-type: none"> <li>Investigation activities that generate noise shall be limited to the hours between 7:00 A.M. to 7:00 P.M., and prohibited on Sundays and federal holidays.</li> <li>Investigation equipment shall be properly maintained per manufacturer specifications and fitted with the best available noise suppression devices (e.g., mufflers, silencers, wraps). Pneumatic powered socket wrenches shall be low noise (85 dBA or less measured at 75 feet) when operating, shrouded or shielded, and all intake and exhaust ports on power equipment, such as engine driven air compressors, shall be muffled or shielded using best available technology.</li> <li>Investigation equipment shall not idle for extended periods of time (more than 15 minutes) when not being utilized during investigation activities.</li> <li>A disturbance coordinator shall be designated by PG&amp;E, which will post contact information in a conspicuous location near investigation areas so that it is clearly visible to nearby noise-sensitive receptors as labeled in Figure 4.7-2. In addition, mailing of the same information will be sent to nearby noise-sensitive receptors as labeled in Figure 4.7-2 and Interested Native American Tribes (Chemehuevi Indian Tribe, Cocopah Indian Tribe, Colorado River Indian Tribes, Fort Mojave Indian Tribe, the Fort-Yuma Quechan Indian Tribe, and the Hualapai Indian Tribe). The coordinator will manage complaints resulting from the investigation noise. Reoccurring disturbances will be evaluated by a qualified acoustical consultant retained by PG&amp;E to ensure compliance with applicable standards. The disturbance coordinator will contact nearby noise-sensitive receptors as labeled in Figure 4.7-2 and Interested Tribes, advising them of the investigation schedule. The disturbance coordinator will also consider the timing of soil investigation activities in relation to Tribal ceremonial</li> </ol>	Significant and Unavoidable	<p><b>Finding:</b> DTSC finds that changes or alterations have been required in, or incorporated into, the Project that substantially lessen, but not to a less than significant level, this significant effect on the environment. Even with the implementation of the mitigation measures outlined for Impact NOI-1, the project retains the potential to result in significant noise impacts on the Topock Traditional Cultural Property (TCP). Since no feasible mitigation measures or alternatives are available to reduce this impact to a less than significant level, this impact remains significant and unavoidable. DTSC further finds that complete avoidance of direct and indirect noise effects of the project to the TCP is not feasible. This is because the soil investigation activities are necessary to gather sufficient information to reliably characterize the nature and extent of soil and sediment contamination within the Project Site, enabling completion of the Final RFI/RI Report Volume 3 (Soil) and risk assessment as required by the 1996 Consent Agreement as soon as practicable and consistent with applicable state laws and regulations.</p> <p><b>Overriding Considerations:</b> The environmental, economic, social and other benefits of the project override this significant adverse impact of the project, as is more fully stated in the Statement of Overriding Considerations.</p> <p><b>Facts in Support of Finding:</b> DTSC has determined that implementation of the Project could exceed San Bernardino County noise standards for a place of worship and could consequently result in a temporary substantial increase in ambient noise levels. Ambient noise levels at existing noise-sensitive land uses may experience increased noise levels due to soil investigation activities for short-term periods. As a result, this impact would be significant. (Impact NOI-1)</p>

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**TABLE OF SIGNIFICANT IMPACTS, MITIGATION MEASURES, AND CEQA FINDINGS OF FACT**

Significant Environmental Impact	Mitigation Measures	Level of Significance after Mitigation	Findings of Fact
	<p>events that are sensitive to noise, which will be accommodated by PG&amp;E to the maximum extent practicable. The disturbance coordinator will also verify and document that all activities at the Project Site are in compliance with all items presented in Mitigation Measure NOI-1.</p>		<p>In order to reduce this impact Mitigation Measure NOI-1 shall be implemented.</p> <p>Implementation of Mitigation Measure NOI-1 will ensure that noise generated during temporary soil investigation activities will be minimized and that activities will be limited to daytime hours. However, existing noise-sensitive land uses will still experience increased noise levels due to Project activities for short term periods. The Project could exceed applicable County standards for a place of worship and would consequently result in a temporary substantial increase in ambient noise levels. The unique values associated with the Topock TCP cannot be reconciled with additional Project-related noise. Even after mitigation, this impact would remain significant and unavoidable (see FEIR Volume 3, pp. 4.7-17-20).</p> <p>The Project is being approved notwithstanding these effects because the soil investigation activities are necessary to gather sufficient information to reliably characterize the nature and extent of soil and sediment contamination within the Project Site, enabling completion of the Final RFI/RI Report Volume 3 (Soil) and risk assessment as required by the 1996 Consent Agreement as soon as practicable and consistent with applicable state laws and regulations. The reasons for approving the Project notwithstanding its environmental impacts are further discussed in the Statement of Overriding Considerations.</p>
<b>Cumulative</b>			
<p><b>IMPACT CUM-1: Cumulatively Considerable Impacts to Cultural Resources.</b> Implementation of the proposed Project, in combination with other projects in the geographic scope, could cause a substantial adverse change in the significance of</p>	<p><b>Implement Mitigation Measures CR-1, CR-2, and CR-4.</b></p>	<p>Significant and Unavoidable</p>	<p><b>Finding:</b> DTSC finds that changes or alterations have been required in, or incorporated into the Project that substantially lessen, but not to a less than significant level, the Project's cumulative impacts on cultural resources. Even with the implementation of Mitigation Measures CR-1, CR-2, and CR-4, the project retains the potential to contribute incrementally to these impacts.</p>

**TABLE 1**  
**TABLE OF SIGNIFICANT IMPACTS, MITIGATION MEASURES, AND CEQA FINDINGS OF FACT**

Significant Environmental Impact	Mitigation Measures	Level of Significance after Mitigation	Findings of Fact
<p>the historical resource identified as the Topock Traditional Cultural Property (TCP); cause a substantial adverse change in the significance of unknown historical resources; and disturb human remains, including those interred outside of formal cemeteries.</p>			<p>Since no feasible mitigation measures or alternatives are available to reduce this impact to a less than significant level, this impact remains significant and unavoidable. DTSC further finds that complete avoidance is not feasible. This is because the soil investigation activities are necessary to gather sufficient information to reliably characterize the nature and extent of soil and sediment contamination within the Project Site, enabling completion of the Final RFI/RI Report Volume 3 (Soil) and risk assessment as required by the 1996 Consent Agreement as soon as practicable and consistent with applicable state laws and regulations.</p> <p><b>Overriding Considerations:</b> The environmental, economic, social and other benefits of the project override this significant adverse impact of the project, as is more fully stated in the Statement of Overriding Considerations.</p> <p><b>Facts in Support of Finding:</b> The Project's impacts to cultural resources, when considered in combination with other past, present, and future projects at a regional scale, could contribute to a cumulatively significant impact to historical resources (including the TCP), archaeological resources, and human remains. The Project Site and surrounding vicinity contain a number of important sites of cultural and/or archaeological importance that are integral to the cultural traditions of Native American Tribes located throughout the region.</p> <p>Projects that have already been implemented or may occur in the foreseeable future at or near the Project Site that could impact cultural resources are described in the FEIR Volume 3, Chapter 6, "Cumulative Impacts." The projects in the cumulative scenario have the potential to involve ground-disturbing activities that would directly impact significant cultural resources and paleontological resources. These projects may also result in visual, auditory, and other environmental impacts that may adversely affect the Topock TCP. For these reasons, the</p>

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			<p>combined impacts on cultural resources in the geographic scope are considered cumulatively significant. When considered in combination with the impacts of other projects in the cumulative scenario, the Project's incremental contribution to impacts on cultural resources including historical resources (i.e., the Topock TCP), unique archaeological resources, and human remains would be cumulatively considerable. (Impact CUM-1).</p> <p>In order to reduce these impacts, Mitigation Measures CR-1, CR-2, and CR-4 shall be implemented (see FEIR Volume 3, pp. 6-26 -6-28).</p> <p>Although implementation of Mitigation Measures CR-1, CR-2, and CR-4 will reduce the significance of the impacts to the degree feasible, the only method to fully mitigate these impacts would be complete avoidance of any future project activity; therefore, no feasible mitigation exists that would reduce the Project's contribution to less than considerable. The Project's contribution to this significant cumulative cultural impact is therefore cumulatively considerable (significant and unavoidable).</p> <p>The Project is being approved notwithstanding these effects because the soil investigation activities are necessary to gather sufficient information to reliably characterize the nature and extent of soil and sediment contamination within the Project Site, enabling completion of the Final RFI/RI Report Volume 3 (Soil) and risk assessment as required by the 1996 Consent Agreement as soon as practicable and consistent with applicable state laws and regulations. The reasons for approving the Project notwithstanding its environmental impacts are further discussed in the Statement of Overriding Considerations.</p>



Exhibit 2 to the Statement of  
Decision and Resolution of Approval

Mitigation Monitoring and  
Reporting Program  
(FEIR Chapter 11)

# CHAPTER 11

## Mitigation Monitoring and Reporting Program

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The California Department of Toxic Substances Control (DTSC) prepared an environmental impact report (EIR) in accordance with the requirements of the California Environmental Quality Act (CEQA) (Public Resources Code, Section 21000 et seq.) and the CEQA Guidelines (California Code of Regulations, Title 14, Section 15000 et seq.). The EIR evaluates the potential significant environmental impacts associated with the Pacific Gas and Electric (PG&E) Topock Compressor Station Soil Investigation Project (Project). The Project involves soil investigation activities at the PG&E Topock Compressor Station (Station).

The EIR identifies significant adverse environmental impacts associated with implementation of the Project. For most significant impacts, the EIR identifies mitigation measures capable of avoiding or reducing the impacts to less-than-significant levels.

CEQA requires a public agency to adopt a reporting or monitoring program at the time of approval to ensure that all adopted mitigation measures are properly implemented (Public Resources Code, Section 21081.6; CEQA Guidelines, Section 15097).

This mitigation monitoring and reporting program (MMRP) is to be used by DTSC to ensure that, if the Project is approved, the mitigation measures identified in the EIR will be implemented and that implementation is timely and documented. The MMRP is presented in tabular format (Table 11-1). The table columns contain the following information:

**Mitigation Number:** Lists the mitigation measures by number, as designated in the EIR, and by issue area.

**Mitigation Measure:** Provides the text of the mitigation measures (by issue area), as provided in the EIR, each of which has been adopted and incorporated into the Project.

**Timing/Schedule:** Lists the trigger and/or time frame in which the mitigation is expected to take place.

**Implementation Responsibility:** Identifies the entity responsible for implementation of the mitigation measure.

**Completion of Implementation:** DTSC is ultimately responsible for ensuring these mitigation measures are implemented. The “Action” column is to be used by the DTSC to describe the action(s) taken to complete implementation. The “Date Completed” column is to be used to indicate when implementation of the mitigation measure has been completed. The DTSC, at their

discretion, may delegate implementation responsibility or portions thereof to qualified consultants or contractors. However, DTSC still maintains overall responsibility for implementation of mitigation adopted or incorporated into the project.

**TABLE 11-1**  
**MITIGATION MONITORING AND REPORTING PROGRAM FOR THE TOPOCK COMPRESSOR STATION SOIL INVESTIGATION PROJECT**

Mitigation Number	Mitigation Measure	Timing/ Schedule	Implementation Responsibility	Completion of Implementation	
				Action	Date Completed
BR-1	<p>No-net-loss of Wetland, Riparian or other Sensitive Habitat Function or Value.</p> <p>The Project shall be implemented to avoid effects to the habitat values and functions of identified jurisdictional areas (i.e., floodplain and riparian areas, wetlands, and waters of the United States and habitats designated by CDFW as sensitive, including ephemeral washes and western honey mesquite bosque). Before undertaking ground-disturbing activities within East Ravine and Bat Cave Wash, a qualified biologist shall coordinate with PG&amp;E to ensure that the footprints of investigation activities, including drill pads, staging areas, and access routes, are designed to avoid disturbance to sensitive habitats. Where complete avoidance to sensitive habitat is not feasible DTSC shall be notified and Project activities shall be implemented to ensure no-net-loss of habitat value or function under the direction of a qualified biologist. The following avoidance measures shall be implemented when working in Bat Cave Wash and East Ravine:</p> <ol style="list-style-type: none"> <li>No plants or vegetation shall be completely removed – only pruning, trimming, clearing, or similar approaches which allow the natural regrowth of the plant will be allowed;</li> <li>Vegetation pruning, trimming, or clearing shall only occur to access investigation sites and clear around the sample areas where absolutely necessary;</li> <li>The only vegetation to be cut off at the base (cleared rather than pruned or trimmed) will be salt cedar at the mouth of Bat Cave Wash. The roots of the salt cedar at the mouth of Bat Cave Wash will be left in place where possible to allow for natural, rapid regrowth of vegetation;</li> <li>No more than 20 percent of the crown on all native trees, such as palo verde, shall be trimmed, and no main branches shall be trimmed. This is consistent with what is recommended by the International Society of Arboriculture (ISA 2011);</li> <li>Complete removal of vegetation in any work area shall be prohibited; and</li> <li>Project equipment and materials from work areas shall be completely removed and, if the area is not paved, it shall be raked/brushed to remove tire tracks.</li> </ol> <p>“No net loss” shall be achieved through any combination of the following, in descending order of desirability: (1) avoidance; (2) where avoidance is not possible, minimization of impacts on the resource (a – f above); or (3) 1:1 like kind habitat compensation, including use of a mitigation banking program that provides the opportunity to mitigate impacts to rare, threatened, and endangered species and /or the habitat which supports these species in wetland and riparian areas. A biological monitor shall be present for all vegetation trimming, pruning, and clearing to ensure the above measures are implemented and that vegetation is protected to the extent feasible.</p>	During Project planning and implementation/ prior to ground-disturbing activities within East Ravine and Bat Cave Wash	PG&E shall be responsible for implementation of these measures. DTSC shall be responsible for ensuring compliance with input from responsible and trustee agencies.		

**TABLE 11-1**  
**MITIGATION MONITORING AND REPORTING PROGRAM FOR THE TOPOCK COMPRESSOR STATION SOIL INVESTIGATION PROJECT**

Mitigation Number	Mitigation Measure	Timing/ Schedule	Implementation Responsibility	Completion of Implementation	
				Action	Date Completed
BR-4	<p>Disturbance of Special-Status Birds.</p> <p>The following measures shall be implemented to avoid impacts to active nests and nesting birds and to ensure compliance with the Migratory Bird Treaty Act and California Fish and Game Code:</p> <p>a. Vegetation trimming, pruning, or clearing and other activities shall be timed to avoid the nesting season for special-status bird species that may be present (March 15 through September 30) except as provided for in item b, below.</p> <p>b. If vegetation removal or other Project activities are necessary in vegetated areas between March 15 and September 30, DTSC shall be notified and focused surveys for active nests of special-status birds (including Arizona Bell's vireo, California black rail, Yuma clapper rails and other species identified in Table 4.3-3) shall be conducted no more than 72 hours before such activities begin. A qualified biologist shall conduct pre-investigation surveys to identify active nests that could be affected. The appropriate area to be surveyed and the timing of the survey may vary depending on the activity and species that could be affected and shall be determined by the qualified biologist. For the Yuma clapper rail, the pre-investigation surveys shall specifically identify habitat within 300 feet of investigation areas, in accordance with measures set forth in the Bird Avoidance and Minimization Plan (BIAMP) which was finalized on April 30, 2014 (CH2M HILL 2014).</p> <p>c. The qualified biologist shall implement all of the avoidance and minimization measures that are outlined in the BIAMP (CH2M HILL 2014).</p> <p>d. The qualified biologist shall consult the BIAMP (CH2M HILL 2014) for required nesting bird avoidance buffers and requirements for the on-site biological monitor. Buffers vary depending on the species of bird, so the BIAMP (CH2M HILL 2014) should be consulted once a nest is identified.</p>	Before and during Project activities/ no more than 72 hours before construction if during nesting season	PG&E shall be responsible for the implementation of these measures. DTSC shall be responsible for ensuring compliance.		
BR-5	<p>Disturbance of Desert Tortoise and Loss of Habitat.</p> <p>Consistent with the PBA and the USFWS letter concurring with the PBA, the following measures shall be implemented:</p> <p>a. Before any ground-disturbing Project activities begin, a qualified desert tortoise biologist (i.e., an experienced tortoise expert whom USFWS would be confident in the evaluation and survey for the presence of the desert tortoise under the PBA) shall identify potential desert tortoise habitat in areas that could be affected by the Project activities. The qualified desert tortoise biologist shall conduct a pre-investigation desert tortoise clearance survey prior to the start of investigative activities. The qualified desert tortoise biologist shall also conduct monitoring on a periodic basis (1–2 days for a 2-week period) or as a result of a change in investigation boundaries or limits.</p>	Before and during Project activities/ prior to ground-disturbing activities	PG&E shall be responsible for the implementation of these measures. DTSC shall be responsible for ensuring compliance.		

**TABLE 11-1**  
**MITIGATION MONITORING AND REPORTING PROGRAM FOR THE TOPOCK COMPRESSOR STATION SOIL INVESTIGATION PROJECT**

Mitigation Number	Mitigation Measure	Timing/ Schedule	Implementation Responsibility	Completion of Implementation	
				Action	Date Completed
	<p>b. PG&amp;E shall designate a field contact representative who will be responsible for proper execution of the mitigation measures. The field contact representative shall be trained by the qualified desert tortoise biologist and have authority to halt activities that are in violation of the mitigation measures/or pose a danger to listed species. The field contact representative will have a copy of the mitigation measures when work is being conducted on the Project Site. The field contact representative may be a project manager, PG&amp;E representative, or qualified biologist.</p> <p>c. Prior to Project activities and immediately prior to the initiation of ground disturbance, a qualified desert tortoise biologist shall conduct worker awareness training for all PG&amp;E employees and the contractors involved with the proposed Project.</p> <p>d. The field contact representative will be on-site during all Project activities. The qualified desert tortoise biologist will examine work areas for desert tortoises and their sign (i.e., burrows, scat, tracks, remains, and pallets), ensuring 100 percent coverage of the area, and clear each area of activity prior to work initiation. Any desert tortoise burrows and pallets outside of, but near, the project footprint shall be flagged at that time so that they may be avoided during work activities. At conclusion of work activities, all flagging shall be removed. Should any live tortoises be found during the clearance survey, or if a tortoise moves into the work area, all work shall stop immediately and the animal shall be left to move out of the work area on its own accord. Tortoises shall not be handled. Encounters with live desert tortoises shall be reported to BLM Lake Havasu biologists. Information to be reported will include for each individual: the location (narrative, vegetation type, and maps) and date of observation; general conditions and health; any apparent injuries and state of healing; and diagnostic markings.</p> <p>e. All workers shall be required to check under their equipment or vehicle before it is moved. If a desert tortoise is encountered under vehicles or equipment, the vehicle shall not be moved until the animal has voluntarily moved to another location or to a safe distance from the parked vehicle.</p>				
<b>BR-6</b>	<p>Disturbance of Ring-Tailed Cat and Loss of Habitat.</p> <p>The following measures shall be implemented:</p> <p>a. Pre-investigation surveys for ring-tailed cats will be conducted by a qualified biologist prior to the start of investigation activities. No activities that will result in disturbance to nests or ring-tailed cats will proceed prior to completion of the surveys. If no active nests are found, no further action is needed. If a ring-tailed cat nest is present, additional measures will be implemented as outlined below. The CDFW and DTSC will also be notified of any active nests within the proposed disturbance zones.</p>	Before and during Project activities	PG&E shall be responsible for the implementation of these measures. DTSC shall be responsible for ensuring compliance.		

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**MITIGATION MONITORING AND REPORTING PROGRAM FOR THE TOPOCK COMPRESSOR STATION SOIL INVESTIGATION PROJECT**

Mitigation Number	Mitigation Measure	Timing/ Schedule	Implementation Responsibility	Completion of Implementation	
				Action	Date Completed
BR-7	b. If an active ring-tailed cat nest is found, the Project shall be redesigned to avoid the loss of the site occupied by the nest if feasible. If the Project cannot be redesigned to avoid the nest, the CDFW and DTSC will be contacted. If approved by the CDFW and DTSC, demolition of the nest site will commence outside of the breeding season (February 1 to August 30) when the nest is vacated. If a non-breeding nest is found in a site scheduled to be removed, prior to disturbance, the CDFW and DTSC will be notified to review and approve the proposed procedures to ensure that no take occurs as a result of the action. Sites with inactive nests that need to be removed will first be disturbed at dusk, just prior to removal that same evening, to allow adult ring-tailed cats to escape during the darker hours.	During Project activities	PG&E would be responsible for the implementation of these measures. DTSC would be responsible for ensuring compliance.		
	Disturbance of Nelson's Bighorn Sheep. If a bighorn sheep is observed at the Project Site during soil investigation activities, work shall be halted in the vicinity of the sheep (within 250 feet of the sheep). Project activities can recommence after the animal moves away on its own.				
BR-8	Disturbance or Loss of Special-status Bat Species. The following measures shall be implemented to avoid impacts to active maternity roosts of special-status bat species during the maternity roosting season (mid-March through August) and direct harassment, injury or mortality to Townsend's big-eared bats, consistent with the California Fish and Game Code. a. Implementation of soil investigation activities within avoidance areas for potential bat maternity roosting habitat shown in Figure 4.3-5 shall not occur during the maternity season (mid-March through August) with the exception of those activities described in b. However, if soil investigation activities critical to meeting the Project objectives are determined necessary in avoidance areas for potential bat maternity roosting habitat (Figure 4.3-5) during the maternity season, a qualified biologist shall conduct a pre-investigation survey to identify potential active roosts. The pre-investigation survey shall occur the night before soil investigation activities to observe if any bats are exiting crevices and cavities within 100 feet of the proposed work area. The pre-investigation survey will be conducted at sunset for 90 minutes by a qualified biologist with the use of a thermal imaging camera to observe and record any exiting bats. If no bats are observed, work may proceed in the proposed work area the following day, and will remain cleared for the duration of the work activity. Additional pre-investigation surveys will be required in new work areas located more than 100 feet away from the previously surveyed work area. If active roosts are observed (i.e., bats exiting from semi-consolidated sediment or rock),	Before and during Project activities	PG&E shall be responsible for the implementation of these measures. DTSC shall be responsible for ensuring compliance .		

**TABLE 11-1**  
**MITIGATION MONITORING AND REPORTING PROGRAM FOR THE TOPOCK COMPRESSOR STATION SOIL INVESTIGATION PROJECT**

Mitigation Number	Mitigation Measure	Timing/ Schedule	Implementation Responsibility	Completion of Implementation	
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	no soil investigation activities may take place in the proposed work area the following day and not until it can be verified with thermal imaging that bats have left the area or the maternity roosting season is over.				
	b. Some soil investigation activities will be allowed to occur without a pre-investigation survey in limited work areas located within the larger avoidance areas depicted on Figure 4.3-5 during the bat maternity season (mid-March through August). These activities are limited to: pedestrian foot traffic; non-construction transportation vehicles; use of hand tools; and low noise groundwater sampling by submerged pump powered either by electric line, battery or small generator that emits 59 decibel or less at 33 meters and is located a minimum of 20 meters away from potential maternity roosting habitat. Additional discrete ongoing activities may also continue to occur in the bottom of the wash areas depicted, including pedestrian and passenger car access for cultural surveys, educational tours and groundwater sampling, and activities associated with the approved 2011 Groundwater Remediation Project.				
	c. If Project related work will continue into the 2016 bat maternity season, additional focused bat surveys for Townsend's big-eared bats will be required, since changes in the presence or absence of Townsend's big-eared bats could occur. A focused bat survey shall be required no more than 30 days prior to the start of Project field implementation during the 2016 bat maternity season to specifically determine if any Townsend's big-eared bats are present on or immediately adjacent to work areas. If Townsend's big-eared bats are detected, Mitigation Measure BR-8d shall be required.				
	d. If Townsend's big-eared bat, a Candidate species under CESA, is observed or detected on the Project Site during the surveys described in Mitigation Measures BR-8a or BR-8c, the Project shall be modified if necessary, with input from a qualified biologist, to avoid all potential harassment, impact or injury to this species. If the Project cannot be modified to avoid impacts to the Townsend's big-eared bat, removal or modification of roosts could occur if approved by CDFW and when the roost is vacant. Prior to disturbance of the roost, the CDFW will be notified to review and approve the proposed procedures (such as the use of exclusion devises or other roost modification) to ensure that no injury or impact occurs as a result of the action.				



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Mitigation Number	Mitigation Measure	Timing/ Schedule	Implementation Responsibility	Completion of Implementation	
				Action	Date Completed
<b>BR-11</b>	Substantial Interference with Fish or Wildlife Movement Corridors or Native Wildlife Nursery Sites.  Mitigation Measure BR-8 shall be implemented to address potential impacts to special-status bat maternity roosts.	Before and during Project activities	PG&E shall be responsible for the implementation of these measures. DTSC shall be responsible for ensuring compliance.		
<b>CR-1</b>	<p>Historical Resource Identified as the Topock TCP.</p> <p><b>CR-1a: Tribal Coordination</b></p> <p><i>CR-1a-1: Tribal Document Review and Comment.</i> Interested Tribes shall continue to be afforded the opportunity to review and comment on all cultural resources-related documentation prepared as a result of this Project. Tribal comments shall be considered to the extent feasible by DTSC, in coordination with Interested Tribes, PG&amp;E, and representative landowners (BLM, BOR, FMIT, PG&amp;E, and USFWS). Cultural resources documents shall include, but not be limited to, pre-investigation verification survey memoranda; daily archaeological monitoring logs; monitoring report to be prepared at the close of ground-disturbing activities; annual monitoring reports; DPR forms; and any documentation arising as a result of the inadvertent discovery of potential historical resources of a Tribal nature pursuant to CR-2d (Inadvertent Discovery of Potential Historical Resources and Unique Archaeological Resources). Interested Tribes shall also be afforded the opportunity to review and comment on technical documents including, but not limited to, soil investigation-related plans and reports, bench and pilot study implementation plans, and biological resources reports.</p> <p><i>CR-1a-2: Tribal Access.</i> Interested Tribes shall be provided access to the Project Site to the extent PG&amp;E has the authority to facilitate such access and be consistent with existing laws, regulations, and agreements as they pertain to property within the Project Site. On federal property, access shall be governed by the provisions of Appendix B (<i>Tribal Access Plan</i>) of the CHPMP. On non-federal property, access shall be accommodated by PG&amp;E to the extent feasible; the access plan may place restrictions on access into certain areas, such as the Station and the existing evaporation ponds, subject to DTSC review with regard to health and safety concerns and to ensure noninterference with approved investigation activities. PG&amp;E shall retain copies of all access-related communications to be provided to DTSC on a quarterly basis, as required by CR-1a-3.</p> <p><i>CR-1a-3: Tribal Communication.</i> Consistent with past practices and the communication processes previously entered into by PG&amp;E with Interested Tribes, PG&amp;E shall continue to communicate with Interested Tribes prior to the start of and during investigation activities for the Project. PG&amp;E shall document,</p>	Before, during and after Project activities	PG&E shall be responsible for the implementation of these measures. DTSC shall be responsible for ensuring compliance.		

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	<p>and accommodate where feasible, the Tribes' preferences for method of communication and for transmitting large documents, and shall seek to avoid scheduling conflicts between scientific survey (i.e., pre-investigation historical resources verification survey, annual historical resources monitoring, and biological resources survey) and Topock-related meeting activities to the greatest extent possible. Outreach efforts between the Interested Tribes and PG&amp;E shall be communicated by PG&amp;E to DTSC quarterly during investigation activities for review and input.</p> <p>Communication protocols as they relate to Tribal involvement in the worker cultural resources sensitivity training shall be governed by CR-1b.</p> <p>Communication protocols as they relate to Tribal monitoring of scientific survey and Project-related ground-disturbing activities shall be governed by CR-1d.</p> <p>Communication protocols as they relate to Tribal monitoring of annual historical resource monitoring shall be governed by CR-2c.</p> <p>Communication protocols as they relate to inadvertent discoveries of potential historical resources as defined by CEQA will be governed by CR-2d. Human remains will be governed by CR-4.</p> <p><b>CR-1b: Worker Education Program</b></p> <p>A worker cultural resources sensitivity program shall be implemented in addition to any requirements under the PA and CHPMP, but may be integrated in a manner that avoids duplication of requirements under the PA and CHPMP. Specifically, an initial sensitivity training session shall be provided by PG&amp;E to all Project employees, contractors, subcontractors, and other professionals prior to their involvement in any ground-disturbing activities, with subsequent training sessions to be held as new personnel become involved in the Project. PG&amp;E shall invite Interested Tribes to participate in and present Tribal perspectives during the training sessions. The sensitivity program shall address: the cultural (Native American, archaeological, and paleontological) sensitivity of the Project Site and a tutorial providing information on how to identify these types of resources; appropriate behavior; worker access routes and restrictions; work area cleanliness; procedures to be followed in the event of an inadvertent discovery; safety procedures when working with monitors; and consequences in the event of noncompliance. PG&amp;E shall notify DTSC and the Interested Tribes no less than 2 weeks prior to the initial training session. Subsequent training sessions may be of a less formal nature; however, they must be comprehensive in the subject matter covered. Tribes will be provided the opportunity to participate in informal training sessions if available. PG&amp;E will keep records of training materials together with attendance rosters, and provide them to DTSC quarterly.</p>				

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Mitigation Number	Mitigation Measure	Timing/ Schedule	Implementation Responsibility	Completion of Implementation	
				Action	Date Completed
	<p>CR-1c: Pre-Investigation Historical Resources Field Verification</p> <p><i>CR-1c-1: Personnel Qualifications Standards.</i> Cultural resources consulting staff shall meet, or be under the direct supervision of individuals meeting, the minimum professional qualifications standards (PQS) set forth by the Secretary of the Interior (codified in 36 CFR Part 61; 48 FR 44739). DTSC shall have approval authority over PG&amp;E's cultural resources consultant.</p> <p><i>CR-1c-2: Pre-Investigation Historical Resources Field Verification.</i> A pre-investigation historical resources field verification for soil sampling locations shall be conducted by PG&amp;E after approval of the work plan but not less than four weeks prior to the commencement of ground-disturbing activities in these locations. Additional field verifications may be completed as Project work progresses, provided the field portions of the verifications are conducted not less than four weeks prior to the start of ground disturbance in that area. Also, field verifications for contingency and pilot studies shall occur after approval work plan(s) but not less than four weeks prior to the start of ground disturbance. The field verification shall include all sampling locations, including any future pilot study areas, new access areas, and equipment and materials staging areas, plus a 50-foot buffer surrounding sampling areas where topography allows. Sampling activities may occur within the buffer area without additional field verification. Interested Tribes shall be afforded the opportunity to participate and shall be provided 2 weeks (14 calendar days) notice prior to the start of the field verification. The objective of the field verification will be to verify that additional resources qualifying as historical resources under CEQA are not present within the investigative location areas. Interested Tribes shall be afforded the opportunity to identify, and DTSC to consider, for the purposes of avoidance, any physical features of Tribal significance within the field verification area, including but not limited to trails, rock features, desert pavement areas, and cleared circles that might be considered contributors to the TCP. <i>Pre-Investigation Historical Resources Field Verification Memoranda</i> following the California Office of Historic Preservation's (OHP's) <i>Archaeological Resource Management Reports (ARMR)</i> guidelines, shall be prepared by PG&amp;E that documents the methods of the field verification, participants involved in the field verification, and the results of the field verification. Interested Tribes shall be invited to prepare a section that reports Tribal observations during the field verification, and asked to provide any observations to PG&amp;E within 2 weeks of the field portion of the verification. Memoranda shall be submitted to DTSC for review and comment no later than 10 days prior to the start of ground disturbance in an area, and the submission shall include any Tribal observations given to PG&amp;E within the two-week time frame set forth above. Tribal review and comment of <i>Pre-Investigation Historical Resources Field Verification Memoranda</i> shall be governed by CR-1a-1.</p> <p>In the event that resources qualifying as historical resources under CEQA are found in the investigation areas, including physical features of traditional cultural</p>				

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				Action	Date Completed
	<p>value to Interested Tribes as contributors to the TCP or archaeological resources, are identified during the field verification, treatment of such resources shall be governed by procedures outlined in CR-1e and CR-2, respectively. If avoidance of the identified resources is determined by DTSC, in coordination with respective landowners, Interested Tribes, and PG&amp;E to be infeasible because it would impede the fundamental Project objective to obtain sufficient information to allow for a complete soil characterization of the area, protective actions (such as elevated ramps, protective coverings or other types of temporary capping) shall be taken to reduce or minimize impacts to the resource to the maximum extent feasible. Any protective measures would be implemented in coordination with DTSC. Work areas would be restored to pre-investigation conditions consistent with CR-1e-6.</p> <p><b>CR-1d: Cultural Resources Monitoring Program</b></p> <p>The Cultural Resources Monitoring Program shall be consistent with Appendix C (<i>Topock Remediation Project Programmatic Agreement Tribal and Archaeological Monitoring Protocols</i>) of the PA and Section 6.6.4, "Construction Monitoring," of the CHPMP. PG&amp;E shall include DTSC as a party requiring notification and coordination along with the parties already listed in the Appendix C Monitoring Protocols.</p> <p>Archaeological monitoring shall be conducted during all Project-related ground-disturbing activities for the purpose of identifying and avoiding impacts to archaeological resources that could potentially qualify as historical resources under CEQA. Archaeological monitors shall work under the direct supervision of an archaeologist meeting the PQS as described in CR-1c-1 and shall complete daily monitoring logs. Upon completion of investigation activities, a Soil Investigation Monitoring Report shall be prepared following ARMR guidelines. The monitoring report shall document dates of monitoring and monitoring participants, activities observed, soil types observed, and any archaeological resources encountered. PG&amp;E shall provide Interested Tribes an opportunity to contribute their observations to the monitoring report. To be included in the monitoring report, the Tribal section must be provided to PG&amp;E within 8 weeks after completion of monitoring activities. DPR 523 forms, following the OHP's <i>Instructions for Recording Historical Resources</i>, shall be prepared and filed with the SBAIC for all newly identified and updated resources and shall be appended to the monitoring report. The report shall be provided to the Tribes for review and comment consistent with CR-1a-1. The report shall be provided to DTSC and the Tribes for review and comment within 16 weeks of Project completion.</p> <p>Interested Tribes shall be invited to monitor during scientific survey (as defined in CR- 1a-3) and all ground-disturbing activities associated with the Project. PG&amp;E shall provide Tribal monitors with reasonable compensation consistent with historic rates, for all monitoring work performed. Interested Tribes shall be afforded a minimum of 1 week's notice prior to the commencement of project-related ground-disturbing activities. During Project activities, Interested Tribes</p>				

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Mitigation Number	Mitigation Measure	Timing/ Schedule	Implementation Responsibility	Completion of Implementation	
				Action	Date Completed
	<p>shall be provided with weekly work forecasts to facilitate scheduling of monitors. Because Project implementation activities are often unpredictable, there may be changes in work activities. Interested Tribes shall be notified by PG&amp;E of any scheduling changes as soon as possible. PG&amp;E will utilize daily field meetings, telephone, and email as methods of communicating work schedules. Tribal Monitors shall be alerted at the end of each work day whether work activities will be taking place the following day.</p> <p>CR-1e: Protective Measures for the Topock TCP</p> <p><i>CR-1e-1: Avoidance and Preservation in Place.</i> PG&amp;E shall carry out, and require all subcontractors to carry out, all Project activities in ways that minimize significant impacts to resources associated with the Topock TCP consistent with Stipulation I (B) of the PA and Section 7.1 of the CHPMP, and to the maximum extent feasible as it relates to the Project objectives of soil characterization as determined by DTSC, in coordination with PG&amp;E, Interested Tribes, and respective landowners.</p> <p><i>CR-1e-2: Restrict Personnel Access Beyond Delineated Work Areas.</i> Work areas (including sampling locations, new access areas, and materials and equipment staging areas) shall be fenced, or otherwise delineated, in coordination with Tribal monitors to prevent incursion of personnel outside of designated work areas.</p> <p><i>CR-1e-3: Prioritized use of Previously Disturbed Areas.</i> To minimize impacts to intact landforms and natural features important to Tribes as part of the Topock TCP, priority shall be given to siting project elements that have not formerly been subject to Tribal review and input as part of the Soil Work Plan (including the potential 25 percent contingency samples, bench scale tests, pilot studies, and geotechnical evaluations) within previously disturbed areas (areas disturbed within the last 50 years) over undisturbed or pristine areas to the maximum extent feasible as determined by DTSC, in coordination with Interested Tribes, PG&amp;E, and respective landowners. Interested Tribes shall be afforded the opportunity to express, and DTSC shall consider, whether there are specific instances where disturbed areas may be more culturally sensitive than non-disturbed areas.</p> <p><i>CR-1e-4: Avoidance of Indigenous Plants of Biological and Cultural Significance.</i> Prior to Project initiation, a qualified biologist capable of identifying both native and non-native plants within the region (to species) shall flag (or otherwise mark) indigenous plant specimens that shall be protected and avoided. The qualified biologist shall educate all on-site Project personnel about the indigenous plants prior to their involvement in Project activities at the Project Site. During Project activities, a biological monitor shall be present at all times to ensure the indigenous plant species of biological and traditional cultural significance as identified in Appendix D-3 of this DEIR are protected and avoided during Project implementation to the extent practicable. Flagging of indigenous plant species</p>				

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	<p>and worker education (consistent with CR-1b) shall occur prior to Project initiation. Protection of identified species shall occur through biological monitoring during investigative activities and Project implementation.</p> <p><i>CR-1e-5: Minimize Noise Disturbances.</i> Impacts to the natural auditory setting associated with the TCP shall be minimized to the extent feasible as governed by NOI-1.</p> <p><i>CR-1e-6: Work Area Restoration.</i> As discussed in the "Project Description," Section 3.5.6, following completion of work in each work area, all Project equipment and materials shall be removed from the work areas. If the area is not paved, the area will be raked/brushed to remove tire tracks and restored to substantially the same condition(s) as prior to the soil investigation sampling, to minimize impacts to the natural environment associated with the Topock TCP.</p> <p><i>CR-1e-7: Displaced Soil Procedures.</i> Treatment, handling, and disposition of Resource Conservation and Recovery Act (RCRA) and non-RCRA hazardous materials, nonhazardous materials, and clean materials shall comply with <i>Management Protocol for Handling and Disposition of Displaced Site Material, Topock Remediation Project, Needles, CA</i> of the Soil RCRA Facility Investigation/Remedial Investigation Work Plan. Soil export, including clays, and soil import will be limited where feasible as determined by DTSC, consistent with the <i>Protocol</i>.</p> <p><i>CR-1e-8: Technical Review Committee.</i> The Technical Review Committee (TRC), constituting a multidisciplinary panel of independent scientific and engineering experts to advise the Interested Tribes, shall continue through soil remedy selection and construction phase of the Groundwater Remedy (whichever comes later), at which time the necessity and dollar value of the TRC shall be assessed by PG&amp;E and, with the approval of DTSC, shall either be extended, reduced, or terminated. This TRC is the same committee established by CUL-1a-4 of the January 2011, Certified Groundwater Remedy EIR.</p> <p><i>CR-1e-9: Open Grant Funding.</i> Open grant funding, constituting two part-time cultural resource specialist/project manager positions, shall continue through soil remedy selection and construction phase of the Groundwater Remedy (whichever comes later), at which time the necessity and dollar value of the open grant program shall be assessed by PG&amp;E and, with the approval of DTSC, shall either be extended or terminated. This Open Grant Funding is the same as established by CUL-1a-11 of the January 2011, Certified Groundwater Remedy EIR.</p>				

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Mitigation Number	Mitigation Measure	Timing/ Schedule	Implementation Responsibility	Completion of Implementation	
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CR-2	<p>Historical Resources (Other than the Topock Traditional Cultural Property [TCP]) and Unique Archaeological Resources.</p> <p><i>CR-2a: Avoidance and Preservation in Place.</i> PG&amp;E shall carry out, and require all subcontractors to carry out, all investigation activities in ways that avoid significant impacts to historical resources consistent with General Principle I(B) of the PA and Section 7.3 of the CHPMP to the maximum extent feasible as it relates to the Project objectives of soil characterization as determined by DTSC, in coordination with Tribes, PG&amp;E, and respective landowners.</p> <p><i>CR-2b: Additional Protective Measures.</i> Mitigation Measures CR-1a through CR-1d, CR-1e-2, and CR-1e-3 shall be implemented to further reduce impacts to historical resources (other than the Topock TCP) and unique archaeological resources.</p> <p><i>CR-2c: Annual Historical Resources Monitoring Program.</i> PG&amp;E shall add the known 20 historical resources (including 15 archaeological resources and 5 historic-period built resources located within the Project Site [see Table 4.4-3]), plus any additional historical resources that may be identified during Project implementation, to the established annual monitoring program as prescribed by Section 6.6.5, "Periodic Site Monitoring," of the CHPMP. Monitoring shall continue on an annual basis (or less frequently as determined by DTSC) until completion of the soil investigation. PG&amp;E shall afford Tribes the opportunity to participate in Tribal monitoring during the annual monitoring program and provide, at a minimum, 2 weeks' written notice to Tribes prior to the commencement of annual monitoring.</p> <p>The annual monitoring program shall include: confirmation of resource boundaries with submeter GPS; any relocation of previously identified features; confirmation of locations, quantities, and types of artifacts present; and photography to document whether any change in resource condition has occurred. Field observations shall be documented in a Site Condition Assessment Form and a database spreadsheet (such as Microsoft Access or Excel) in accordance with Section 6.6.5, "Periodic Site Monitoring" of the CHPMP. DPR 523 form updates, following OHP <i>Instructions for Recording Historical Resources</i>, will be prepared and filed with the SBAIC for all resources where changes in setting or condition are observed. The Site Condition Assessment Forms, database spreadsheet, and DPR 523 form updates shall be provided to DTSC upon completion of each annual monitoring event. PG&amp;E shall notify DTSC upon scheduling and completion of each annual monitoring event. Each annual monitoring event shall be documented in an <i>Annual Monitoring Report</i> following <i>ARMR</i> guidelines and shall be submitted to DTSC by December 1 of each year. Review and comment of the report by Tribes shall be governed by CR-1a-1.</p> <p><i>CR-2d: Inadvertent Discovery of Potential Historical Resources and Unique Archaeological Resources.</i> In the event that resources potentially qualifying as</p>	Before, during, and after Project activities, as detailed in the individual Mitigation Measures CR-2a through CR-2d	PG&E shall be responsible for the implementation of these measures. DTSC shall be responsible for ensuring compliance.		

**TABLE 11-1**  
**MITIGATION MONITORING AND REPORTING PROGRAM FOR THE TOPOCK COMPRESSOR STATION SOIL INVESTIGATION PROJECT**

Mitigation Number	Mitigation Measure	Timing/ Schedule	Implementation Responsibility	Completion of Implementation	
				Action	Date Completed
CR-3	historical resources or unique archaeological resources per CEQA Guidelines Section 15064.5 are inadvertently discovered during ground-disturbing activities, work in the vicinity of the discovery shall immediately cease within a 50-meter radius and temporary protective measures shall be implemented. The radius of the protected area may be modified if determined appropriate by DTSC, BLM, PG&E, and the Tribal Monitor with final approval by DTSC on non-federal and private land and final approval by BLM on federal land. PG&E shall notify DTSC within 24 hours of the discovery of any potential historical or unique archaeological resources. Avoidance and preservation in place shall be the preferred manner of mitigating impacts to such resources to maintain the important relationship between artifacts and their archaeological context in order to preserve each resource's scientific value, as well as to preserve the cultural values ascribed to resources by the Tribes. The feasibility of avoidance, as it relates to the Project objectives, shall be determined by DTSC, in coordination with PG&E, Tribes, and respective landowners. Preservation alternatives for consideration shall include: avoidance, data recovery of the materials associated with the resource, and capping. Tribes generally prefer avoidance over data recovery or capping.				
	Treatment of discoveries shall be managed under Stipulation IX, "Discoveries" of the PA and Section 8, "Discoveries" and Appendix C, "Discovery Plan" of the CHPMP. PG&E shall notify DTSC and coordinate with the parties already listed in the Appendix C Discovery Plan protocols. Avoided resources may be determined discretionarily eligible by DTSC pursuant to CEQA Section 15064.5(a)(3) as individual resources eligible for listing in the NRHP and the CRHR and as contributors to the Topock TCP. In the event, data recovery is the only feasible mitigation available, resources subject to data recovery shall be evaluated for individual listing in the NRHP and CRHR and as contributors to the Topock TCP, taking into consideration all four register criteria, and as unique archaeological resources. Curation of recovered archaeological materials recovered from federal lands shall be consistent with Stipulation XIII(A) and (B) of the PA. Curation of recovered materials from non-federal lands shall be coordinated by and between DTSC, Tribes, and the respective landowner.				
	Paleontological Resources				
	CR-3a: Worker Education Program				
	PG&E shall fully enforce participation in the Worker Education Program as governed by CR-1b to ensure personnel awareness of cultural and paleontological sensitivities associated with the Project Site.				
	CR-3b: Inadvertent Discovery of Paleontological Resources				
	In the event of inadvertent discovery of paleontological resources, all work shall be halted within a 50-meter radius and temporary protective measures shall be implemented until the discovery can be evaluated by a qualified paleontologist (defined as a paleontologist meeting the requirements of the Society of				
		During Project activities	PG&E shall be responsible for the implementation of these measures. DTSC shall be responsible for ensuring compliance.		



**TABLE 11-1  
MITIGATION MONITORING AND REPORTING PROGRAM FOR THE TOPOCK COMPRESSOR STATION SOIL INVESTIGATION PROJECT**

Mitigation Number	Mitigation Measure	Timing/ Schedule	Implementation Responsibility	Completion of Implementation	
				Action	Date Completed
CR-4	Vertebrate Paleontology [SVP, 2010]). The radius of the protected area may be modified if determined appropriate by DTSC, BLM, PG&E, and the qualified paleontologist with final approval by DTSC on non-federal and private land and final approval by BLM on federal land. Appropriate treatment of the discovery shall be determined by DTSC, in coordination with the qualified paleontologist, PG&E, and respective landowners. Based on the nature of the discovery, the qualified paleontologist shall also reassess the need to initiate paleontological monitoring and make recommendations of such to DTSC, PG&E, and the respective landowner. PG&E shall provide DTSC notification of any paleontological discoveries within 24 hours.				
	<b>Human Remains</b>				
	In the event of inadvertent discovery of human remains, all work shall be halted within a 50-meter radius and temporary protective measures shall be implemented. The radius of the protected area may be modified if determined appropriate by DTSC, BLM, PG&E, and the Tribal Monitor with final approval by DTSC on non-federal and private land and final approval by BLM on federal land. Avoidance and preservation in place shall be emphasized as the preferred manner of mitigation for human remains and disturbances shall be avoided to the maximum extent feasible as it relates to the Project objectives of soil characterization, as determined by DTSC, in coordination with Tribes, PG&E, and respective landowners. PG&E shall notify DTSC of any inadvertent discovery of human remains within 24 hours of the discovery.	During Project activities	PG&E shall be responsible for the implementation of these measures. DTSC shall be responsible for ensuring compliance.		
	On non-federal land, PG&E shall contact the San Bernardino County Coroner to evaluate the remains and follow the procedures and protocols set forth in Section 15064.4 (e)(1) of the California Environmental Quality Act. If the Coroner determines the remains are Native American in origin, the Coroner shall contact the NAHC. As provided in PRC Section 5097.98, the NAHC shall identify the person or persons believed to be most likely descended from the deceased Native American. The MLD shall be afforded the opportunity to provide recommendations concerning the future disposition of the remains and any associated grave goods as provided in PRC 5097.98. Per PRC Section 5097.98, the landowner shall ensure that the immediate vicinity, according to generally accepted cultural or archaeological standards or practices, where the Native American human remains are located, is not damaged or disturbed by further development activity until the landowner has discussed and conferred with the MLD regarding their recommendations, taking into account the possibility of multiple human remains.				
	On federal land, the BLM Havasu City Field Office shall be notified and human remain and associated funerary objects shall be treated pursuant to the Native American Graves Protection and Repatriation Act and in accordance with Sections IX and XIII of the PA and Section 8.2 and Appendix D of the CHPMP.				

**TABLE 11-1**  
**MITIGATION MONITORING AND REPORTING PROGRAM FOR THE TOPOCK COMPRESSOR STATION SOIL INVESTIGATION PROJECT**

Mitigation Number	Mitigation Measure	Timing/ Schedule	Implementation Responsibility	Completion of Implementation	
				Action	Date Completed
NOI-1	<p>Potential Impacts to Noise Levels and Noise Standards</p> <p>a. Investigation activities that generate noise shall be limited to the hours between 7:00 A.M. to 7:00 P.M., and prohibited on Sundays and federal holidays.</p> <p>b. Investigation equipment shall be properly maintained per manufacturer specifications and fitted with the best available noise suppression devices (e.g., mufflers, silencers, wraps). Pneumatic powered socket wrenches shall be low noise (85 dBA or less measured at 75 feet) when operating, shrouded or shielded, and all intake and exhaust ports on power equipment, such as engine driven air compressors, shall be muffled or shielded using best available technology.</p> <p>c. Investigation equipment shall not idle for extended periods of time (more than 15 minutes) when not being utilized during investigation activities.</p> <p>d. A disturbance coordinator shall be designated by PG&amp;E, which will post contact information in a conspicuous location near investigation areas so that it is clearly visible to nearby noise-sensitive receptors as labeled in Figure 4.7-2. In addition, mailing of the same information will be sent to nearby noise-sensitive receptors as labeled in Figure 4.7-2 and Interested Native American Tribes (Chemehuevi Indian Tribe, Cocopah Indian Tribe, Colorado River Indian Tribes, Fort Mojave Indian Tribe, the Fort-Yuma Quechan Indian Tribe, and the Hualapai Indian Tribe). The coordinator will manage complaints resulting from the investigation noise. Reoccurring disturbances will be evaluated by a qualified acoustical consultant retained by PG&amp;E to ensure compliance with applicable standards. The disturbance coordinator will contact nearby noise-sensitive receptors as labeled in Figure 4.7-2 and Interested Tribes, advising them of the investigation schedule. The disturbance coordinator will also consider the timing of soil investigation activities in relation to Tribal ceremonial events that are sensitive to noise, which will be accommodated by PG&amp;E to the maximum extent practicable. The disturbance coordinator will also verify and document that all activities at the Project Site are in compliance with all items presented in Mitigation Measure NOI-1.</p>	During Project activities	PG&E shall be responsible for the implementation of these measures. DTSC shall be responsible for ensuring compliance.		

**SOURCES:**

CH2M HILL. 2014. *Bird Impact Avoidance and Minimization Plan Topock Groundwater Remediation Project*. Prepared for Pacific Gas and Electric Company. April 2014;

International Society of Arboriculture (ISA 2011). 2011. *Pruning Mature Trees*. Champaign, IL;

Society for Vertebrate Paleontology (SVP). 2010. *Standard Procedures for the Assessment and Mitigation of Adverse Impacts to Paleontological Resources*. Available: <http://vertpaleo.org/PDFS/8f/8fe02e8f-11a9-43b7-9953-cdcfaf4d69e3.pdf>. Accessed February 20, 2014.